BENGAL SECRETARIAT LIBRARY

PROGRESS REPORT

OF

FOREST ADMINISTRATION

IN THE

PROVINCE OF ASSAM

FOR THE YEAR

1893-94

(From 1st July 1893 to 30th June 1894.)

BY

A. SMYTHIES, ESQ.,

OFFICIATING CONSERVATOR OF FORESTS, ASSAM.

SHILLONG:

PRINTED AT THE ASSAM SECRETARIAT PRINTING OFFICE.

1894.

PRICE ONE RUPEE.

No. 139A.

FROM

A. SMYTHIES, ESQ.,

Offg. Conservator of Forests, Assam,

TO

THE SECRETARY TO THE CHIEF COMMISSIONER OF ASSAM.

Shillong, the 17th September 1894.

SIR,

I HAVE the honour to submit the Annual Forest Administration Report for the year 1893-94.

Twenty copies of the Provincial Map will follow

I have the honour to be,

SIR,

Your most obedient Servant,

A. SMYTHIES,

Offg. Conservator of Forests, Assam.

No. 1330, dated Calcutta, the 15th September 1894.

From—The Comptroller and Auditor General,

To—The Conservator of Forests, Assam.

In continuation of this office letter No. 1241 of the 1st instant, forwarding Annual Forms Nos. 61, 62, and 64 for the forest year 1893-94, I have the honour to say that as the actual receipts and charges have been verified by the Comptroller, Assam, these forms may be incorporated in your Forest Administration Report for the year.

TABLE OF CONTENTS.

	PARAS.
INTRODUCTION	1—13
CHAPTER I.—EXTENSION AND CONSTITUTION OF STATE FORESTS—	
(i) Alteration of areas	14—17
(ii) Forest Settlements	18—19
(iii) Demarcation	20—23
(iv) Surveys	24—25
CHAPTER II.—MANAGEMENT OF STATE FORESTS—	
(i) Regulation of management—	
(a) Working plans	25
(b) Annual plans of operations	27
(ii) Working of the year—	
(a) Communications and buildings	28—30
(b) Protection of forests from injury—	
1 General protection and breaches of Forest Law	31—36
2. Protection from fire	37—39
3. Regulation of grazing and protection from cattle	40—42
(c) Improvement of forest growth—	
1. Natural reproduction	43—46
2. Artificial reproduction	47—55
3. Early thinnings	56
4. Other operations for improvement of growing stock	57
5 Experiments	58
(d) Exploitation of major forest produce—	
2. Selection fellings	59
5. Unregulated fellings	60
(e) Extraction and transport of major forest produce by land and water	61
(f) Exploitation of minor forest produce—	
1. Extraction of fodder	62
2. Grazing	63
3. Miscellaneous produce	64—70

PARAS.

CHAPTER III.—GROSS YIELD AND OUTTURN OF FOREST PRODUCE—

(i) Summary ... ... 71—72

(ii) Departmental operations ... ... 73—77

(iii) Removal of produce by purchasers ... ... 78—86

(iv) Free grants 87

(v) General—

Shared forests 88

Tea boxes 89

Rubber outturn... ... ... 90—95

Bamboos ... ... 96—97

Cane 98

Agar 99

Gurkati permits 100

General export of timber and other produce from the Assam Valley ... ... 100—109

CHAPTER IV.—FINANCIAL RESULTS ... ... 110—116

CHAPTER V.—FOREST ADMINISTRATION ... ... 117—128

ANNUAL FORMS NOS. 46 TO 65.

APPENDICES—

I.—Register of reserved forests.

II.—Kulsi plantation memorandum.

III.—Chardwar ditto ditto.

IV.—Statement of free grants of produce.

V.—Imports and exports of forest produce.

VI.—Statement showing outturn of timber and fuel from Government, foreign, and private forests in the Surma Valley districts.

BENGAL SECRETARIAT LIBRARY

PROGRESS REPORT

OF

FOREST ADMINISTRATION IN ASSAM

FOR THE YEAR 1893-94.

By A. SMYTHIES,

OFFG. CONSERVATOR OF FORESTS, ASSAM.

INTRODUCTION.

1. The chief facts of the forest year from the 1st July 1893 to the 30th June 1894 may be briefly summarised as follows.

2. The area of reserved forests was increased by 57·52 square miles, of which 4·79 square miles is due to resurvey; 977 square miles were under notification as proposed reserves under section 5 of the Regulation. The area of unclassed forests was diminished by 122·41 square miles.

3. The boundaries of the demarcated forests were increased by 5 miles, the expense of keeping up the old boundaries being very nearly the same as in the previous year.

4. No maps of the Goalpara forests have yet been received from the Imperial Forest Survey Department.

5. The working plan for 522½ square miles of Sâl forest in the Goalpara district has since the close of the year been completed and sent to the Press.

6. The number of forest cases disposed of in the Courts was 101, as compared with 130 cases in the previous year, convictions being obtained in 76 cases, or 75 per cent. The number of cases disposed of under section 62 of the Forest Regulation was 643.

7. The area of forests under fire protection was increased to 738,120 acres, out of which an area of 700,104 acres was successfully protected, of 95 per cent., as compared with 99 per cent. in the previous year. The cost of the work was Rs. 10-0-9 per square mile, as compared with Rs. 13-12-2 in 1892-93.

8. All work on the Charduar rubber plantation was ordered to be stopped, and the extension only amounted to 41 acres, the total cost of the new work and upkeep of the old plantation being Rs. 7,674.

9. The gross outturn of the year in timber and fuel, including free grants, was 6,662,665 cubic feet, as compared with 4,611,486 cubic feet in the corresponding period of 1892-93, the increase being principally due to timber removed by purchasers.

The value of the outturn in minor products, including free grants, came to Rs. 64,147.

10. The total revenue collected on rubber under the new system of levying Rs. 12 per maund was Rs. 42,225, as compared with Rs. 51,283 for the fifteen months of 1892-93.

11. The value of all produce granted free of payment was Rs. 84,276.

12. The trade in tea boxes shows a steady increase, and brought in a revenue of Rs. 20,016 from nearly four million boxes of various sizes.

13. The financial results of the forest year show a surplus of Rs. 2,27,390, or Rs. 83,408 in excess of the surplus for the corresponding period of 1892-93, and Rs. 86,830 above that of the fifteen months reviewed in last year's report.

The percentage of surplus to gross revenue increased from 30 to 46 per cent.

CHAPTER I.

EXTENSION AND CONSTITUTION OF STATE FORESTS.

(i) ALTERATION OF AREAS.

General.

15. The following abstract statement shows the different changes effected during the year and the area as it stood at the close of the forest year ending 30th June 1894:

Class.	Area on 1st July 1893.	Added during 1893-94.	Excluded during 1893-94.	Area on 31st June 1894.
	Sq. miles.	Sq. miles.	Sq. miles.	Sq. miles.
Reserves	3,625·48	113·85	56·33	3,683·00
Unclassed	7,140·25	47·88	168·39	7,019·74
Total	10,765·73	161·73	224·72	10,702·74

Of the total area (113·85 square miles) shown as added to reserves during the year, a portion, *viz.*, 52·73 square miles, is due to areas finally settled under section 17 of the Assam Regulation, while the remainder, 61·12 square miles, results from a recalculation of the reserved area in the Goalpara district by the Forest Survey Department. Similarly, the area shown as excluded, 56·33 square miles, is entirely due to resurvey. Thus the total net increase is 57·52 square miles, of which 4·79 square miles is only nominal.

Reserves.

16. The reserved area was increased by 33,749 acres, or 52·73 square miles, as follows:

District.	Name of forest.	Area.		Number and date of notification under section 17 of the Forest Regulation, VII of 1891.
		Acres.	Square miles.	
Goalpara ...	Addition to Bijni reserve	25,530	39·89	No. 2614R., dated the 15th June 1894.
Ditto ...	Ditto Guma ,,	608	0·95	No. 5926R., dated the 2nd August 1893.
Kamrup ...	Ditto Barduar ,,	247	·39	No. 8942R., dated the 2nd December 1893.
Ditto ...	Ditto Jaipur ,,	50	·08	No. 1570R., dated the 16th April 1894.
Ditto ...	Ditto Gizang ,,	3,840	6·00	
Ditto ...	Ditto Kulsi ,,	308	·48	No. 8926R., dated the 1st December 1893.
Ditto ...	Ditto Mugakhal ,,	284	·44	No. 1192R., dated the 19th March 1894.
Ditto ...	Ditto Jharikhuri ,,	1,978	3·09	
Ditto ...	Ditto Milmillia ,,	904	1·41	No. 1231R., dated the 22nd March 1894.
Total ...		33,749	52·73	

Unclassed State forests.

17. The unclassed State forests suffered a net decrease of 120·51 square miles made up as follows:

ADDED.	Sq. miles.	EXCLUDED.	Sq. miles.
By lands relinquished from cultivation and thrown back into waste	47·88	By transfer to reserves ...	52·73
Net decrease... ...	120·51	By waste lands given up for cultivation	115·66
	168·39		168·39

(ii) Forest Settlements.

18. The progress made in bringing new forests under settlement has not been so great as could be desired. In paragraph 16 of last year's Annual Report it was shown that an area of 936 square miles was under settlement, and of that amount no less than 924 square miles still remained unsettled at the close of the year under review. In Cachar we had the two proposed reserves of Kopili Diyang and Gunjong aggregating 508 square miles, and recent orders of the Chief Commissioner render it unlikely that these forests will be reserved, as they are suitable for cultivation. In the Nowgong district there were proposals to reserve forests aggregating 386 square miles, and no progress whatever has been made here owing to the absence of a properly qualified officer.

19. The following abstract of Form No. 47 shows the areas awaiting settlement at the close of the year:

District.	Name of forest.	Area.		Number and date of notification under section 5 of Regulation VII of 1801.
		Acres.	Square miles.	
Cachar ...	Kopili Diyang	191,200	299·00	No. 6298R. of 10th December 1892.
	Gunjong	133,600	209·00	Ditto ditto.
Nowgong ...	Western Mikir Hills reserve	61,440	96·00	No. 1662R. of 16th March 1893.
	Second addition to Doboka reserve.	2,141	3·34	„ 3372R. of 28th August 1891.
	Nomati	120,960	189·00	Ditto ditto.
	Addition to Rangkhang ...	60,800	95·00	Ditto ditto.
	Barkola	1,541	2·40	Ditto ditto.
Sibsagar ...	Panidihingia	19,200	30·00	„ 1377R. of 6th April 1891.
Darrang ...	Addition to Khalingduar ...	4,160	6·50	„ 9158R. of 12th December 1893.
Kamrup ...	Daranga	5,440	8·50	„ 479R. of 27th January 1894
	Subankata ...	4,489	7·00	Ditto ditto.
Garo Hills ...	Addition to Songsac ...	18,083	28·25	No. 53R. of 4th January 1894.
	Ditto Rajasimla ...	110	0·17	
	Ditto Dambu ...	154	0·24	
	Ditto Dhima ...	635	0·99	
	Ditto Chima Bangshi	1,087	1·69	
	Total	625,031	977·08	

Since the close of the year Panidihingia has been declared a reserved forest, and with regard to the rest all that can be said is that special efforts will be made to push on the settlement in Nowgong next cold season as soon as it is possible to appoint a gazetted Forest Officer to that division.

Formalities with regard to the addition to Khalingduar reserve in the Darrang district have been completed, and this area will shortly be gazetted.

(iii) Demarcation.

General.

20. The details of work done during the year will be found in attached form No. 48. The total length of artificial boundary, which last year stood at 1,186 miles, has been increased to 1,191 miles as follows:

	Miles.
Goalpara boundary reduced owing to re-arrangement of boundaries ..	12
Addition to boundaries in Kamrup and Darrang	17
Net increase	5

Cost of maintenance.

21. Of the above, 1,108 miles were cleared and repaired at a cost of Rs. 3,212, or Rs. 2-14-4 per mile, as compared with Rs. 2-13-6 per mile last year; and the 17 new miles of boundary were cleared at a cost of Rs. 109, or Rs. 6-6-7 per mile, as compared with Rs. 3-12-4 last year.

The total expenditure exhibited in Form No. 48 under this head shows Rs. 3,321, whereas in Form No. 61 the amount shown under A—VIII (*a*) comes to Rs. 3,818. The difference (Rs. 497) is thus accounted for:— Rs. 518 spent on clearing block lines and rivers in the Goalpara district, the cost of which is debited to A—VIII (*a*), but does not appear in Form No. 48; and Rs. 21 spent under this head in the Garo Hills but wrongly classified by Comptroller and Auditor General under A—VIII (*a*).

Divisional details.

22. Some of the divisions show a notable decrease of expenditure under this head, especially Goalpara, Kamrup, Darrang, and Lakhimpur, while others show an increase. But the only test is the cost per mile of boundary cleared, and the following tabular statement shows the details for each division:

Division.	1892-93.			1893-94.			Difference, cost per mile, +
	Miles cleared.	Cost.	Cost per mile.	Miles cleared.	Cost.	Cost per mile.	
		Rs.	Rs. a. p.		Rs.	Rs. a. p.	Rs. a. p.
Cachar	68	437	6 6 10	68	468	6 14 1	+ 0 7 3
Goalpara ...	108	353	3 4 3	112	157	1 6 5	− 1 13 10
Kamrup	380	667	1 12 1	380	524	1 6 0	− 0 6 0
Darrang	33	211	6 6 3	33	106	3 3 5	+ 3 2 8
Nowgong	124	45	0 5 9	124	466	3 12 1	+ 3 6 4
Sibsagar	117	316	2 11 2	122	447	3 10 7	+ 0 15 5
Lakhimpur	91	517	5 10 11	69	357	5 2 9	− 0 8 2
Khasi and Jaintia Hills ...	27	15	0 8 10	28	18	0 10 3	+ 0 1 5
Garo Hills.	172	626	3 10 2	172	669	3 14 2	− 0 4 0

From this it is apparent that cheaper work has been done in Goalpara and Darrang, while there has been a large increase in the cost in Nowgong and in Sibsagar. The reason for the increase in Nowgong is thus given by Mr. Copeland:—

"The reason for this large increase in expend s that in former years a great amount of the work was done by villagers without payment in ideration of free dead wood, house posts, fuel, and minor produce. Owing to the mortality *kala-azar*, there are very few villagers left near the reserves to take advantage of this c sion, and the work had to be done by paid labour."

While, in Sibsagar, the Divisional Officer reports that the increase is entirely due to improvements made in the boundaries so as to make them passable by horses. The other differences are slight, and call for no remark.

Inspection of boundaries.

23. Of the total demarcated boundary of eight divisions, *viz.*, 1,687 miles, Divisional Officers report having personally inspected 654 miles, or about 60 per cent. In Lakhimpur and Sibsagar the health of the Divisional Officer did not permit him to inspect a single mile of his boundaries, and Nowgong suffered from not having an officer in sole charge.

(iv.) SURVEYS.

Goalpara survey.

24. The Imperial Forest Survey closed their work in Goalpara in June 1893, and submitted tracings of the areas surveyed in December 1893, but no maps have been received up to date The areas, however, have been calculated, and the new figures have been embodied in the present report and in the working plan for the Sal forests.

Bhutan boundary survey.

25. The cost of surveying the Assam-Bhutan boundary amounted to Rs. 7,567, and it may be noted with regard to paragraph 24 of last year's report that one-half of this will be debited to Forest, the other half to Provincial expenditure.

CHAPTER II.

MANAGEMENT OF STATE FORESTS.

(i) REGULATION OF MANAGEMENT.

(a) WORKING PLANS.

Goalpara plan.

26. The preparation of the Working Plan for the Goalpara Sal forests was in hand from the 1st July 1893. All figures were worked out from the data collected during the previous working seasons, and areas were deduced from the tracings of field sheets supplied by the Superintendent of Forest Surveys, after which the body of the report was completed.

In November, however, during the visit of the Inspector General to Assam, the original scheme of the plan was somewhat modified after a consultation between Mr. Ribbentrop, Mr. McKee, the late Conservator, and Mr. Campbell, the Goalpara Divisional Forest Officer. This necessitated a partial rewriting of the report, which could not be completed owing to the absence of Mr. Lloyd on sick leave. Since Mr. Lloyd's return in June the report has been finally revised, all appendices and tables revised and completed, and the report sent to the Press.

(b) ANNUAL PLANS OF OPERATIONS.

27. All Divisional Officers submitted, as usual, plans of operations for the open season, and these were fairly acted up to during the year. These plans are really explanatory notes to the budget estimates, and there would appear to be room for improvement in the manner in which they are drawn up.

(ii) WORKING OF THE YEAR.

(a) COMMUNICATIONS AND BUILDINGS.

Roads.

28. Form No. 51 gives details of all the amounts spent in the various divisions. Altogether a sum of Rs. 4,909 was spent on roads as compared with Rs. 4,996 last year, out of which the sum of Rs. 625 was for new work in the Garo Hills, consisting of a deviation made between the 10th and 12th mile of the Dambu-Damra road in order to avoid a steep ascent and thus enable traffic to proceed with less difficulty. The following statement shows the expenditure in each division:

Division.	New work.	Repairs.	Total.	Number of miles repaired.	Cost per mile.
		Rs.	Rs.		Rs.
Cachar	.....	268	268	30	8·9
Goalpara	.....	104	104	39	2·7
Kamrup	.....	1,621	1,621	60	27·0
Darrang	.....	1,286	1,286	35	36·7
Sibsagar	.....	485	485	94	5·2
Lakhimpur	.....	127	127	18	7·0
Garo Hills	625	393	1,018	24	16·3
Total	625	4,284	4,909	.....	.....

29. The cost per mile must necessarily vary between wide limits in the various divisions according to local circumstances and the nature of the work done. In the Darrang district where the cost per mile is highest, all the bridges and roads leading to the forests were put into thorough repair; and as it was intended to show the Inspector General of Forests the utterly hopeless state of the natural rubber forests from over-tapping, two old roads leading through the Balipara reserve which had originally been constructed for the Aka expedition in 1883-84, and since then had been allowed to fall into desuetude, were opened out and improved, so that the inspection should not be

unnecessarily delayed. Fifteen miles of these two roads were made fit for driving, and 10 miles more cleared and opened out at a total cost of Rs. 940. The Charduar plantation road which connects three Frontier Police stockades of Balipara, Gabru, and Daimara, with a total length of 18 miles, was also cleared as a bridle path for 7 miles at a cost of Rs. 320; and a bridle path leading from Rangajan village to the Balipara Sâl forest, 5 miles in length, was cleared at a cost of Rs. 26. In other divisions the expenditure was normal, and calls for no special remarks.

Buildings.

30. Form No. 51 shows that a sum of Rs. 11,719 was spent on buildings as compared with Rs. 11,262 last year. Of this amount, Rs. 4,712 was on account of new work, and Rs. 7,007 on account of repairs. The divisional detail is as follows :

	New work.	Repairs.	Total.
	Rs.	Rs.	Rs.
Cachar	255	647	902
Sylhet	128	263	391
Goalpara	1,324	632	1,956
Kamrup	313	2,037	2,350
Darrang	1,683	468	2,151
Nowgong	220	377	597
Sibsagar	27	783	810
Lakhimpur	73	1,188	1,261
Khasi and Jaintia Hills	....	22	22
Garo Hills	689	590	1,279
Total	4,712	7,007	11,719

In the Darrang division a sum of Rs. 1,000 was spent in making the Bhairavighat bungalow habitable during the hot weather and in adding further accommodation, and Rs. 583 were spent on new stables, cook-house, and servants' quarters. The want of a bungalow for headquarters of the officer in this division at Tezpur is much felt. At present the Divisional Officer has to live at Balipara, 16 miles away from his office. Attention will be paid to this during the current year, and endeavours made to find a suitable building site in Tezpur itself.

In Nowgong arrangements for the purchase of a house for the Divisional Officer have been completed, and there will now be suitable accommodation.

In the Kamrup division Rs. 1,725 were spent on repairs to the Forest Bungalow of Gauhati. In the Goalpara division two small inspection huts were built at Sankos and Dangsebari, and various buildings were erected for the establishment. The balance of expenditure under this head was of an ordinary nature.

(b). Protection of Forests from Injury.

1. *General Protection and Breaches of Forest Law.*

Cases prosecuted.

31. Form No. 52 shows that 104 new cases were taken into the courts, as compared with 128 cases in the previous year. At the commencement of the year there were 6 cases pending, and 9 cases remained undisposed of at the close of the year. The courts, therefore, disposed of 101 cases involving 277 persons, and convictions were obtained in 76 cases with 196 persons, a percentage of 75 cases convicted as compared with 78 last year.

Cases compounded.

32. The number of cases disposed of under section 62 of the Assam Forest Regulation was 643, as compared with 374 last year. The amount realised as compensation was Rs. 3,366 as compared with Rs. 2,242 in 1892-93.

Undetected cases.

33. The total number of undetected cases was 7, of which 6 occurred in the Garo Hills.

34. The following statement shows the number of cases in each division

Division.	Cases taken before the Courts		Cases compounded.	
	1892-93.	1893-94.	1892-93.	1893-94.
Cachar	6	6	83	43
Sylhet	77	52	61	171
Goalpara	2	3	7	5
Kamrup	2	.....	11	17
Darrang	7	8	6	13
Nowgong	3	4	41	17
Sibsagar	21	19	62	166
Lakhimpur	8	.....	86	86
Garo Hills	2	7	23	125
Khasi and Jaintia Hills	2	2	.....	.....
Total	130	101	374	643

35. The increase of cases compounded under section 62 occurred almost entirely in the three divisions, Sylhet, Sibsagar, and Garo Hills.

Increase of cases under section 62 explained

In the Garo Hills the Divisional Officer reports that stricter supervision has led to the large increase of cases detected, which consisted for the most part of illegal fellings; but that unauthorized appropriation of forest produce by the inhabitants of the Goalpara, Rangpur, and Mymensing districts living at the foot of the Garo Hills still goes on on a large scale. The question of introducing a set of new rules for the removal of *gurkati* produce is now under consideration.

In the Sibsagar division, where the number of cases compounded rose from 62 to 166, the Divisional Officer reports that stricter supervision over the unclassed State forests accounts for the increase; and in Sylhet petty forest cases were compounded instead of being taken into court. The Extra Assistant Conservator in charge of the Sylhet division explains this increase by saying that, whereas formerly petty cases were chiefly taken into court, and one case would perhaps involve many accused, now that orders have been issued to compound these cases, each delinquent is shown separately. There is probably some truth in this explanation, because, on adding the cases taken into court to those compounded under section 62 of the Assam Forest Regulation, we find that in 1892-93 138 cases involved 319 persons, and in 1893-94 there were 223 cases in which exactly the same number of persons, *viz.*, 319, were implicated.

The decrease of cases compounded in Cachar is explained by Mr. Barrett as follows:

"The number of cases during the year under report as compared with that of the previous year, shows a considerable decrease, and is due partly to the fact that the people have come to understand forest rules better than they did formerly, and partly to the fact that the better and more honest working on the part of the members forming the protective establishment has had the effect of preventing the commission of many forest offences."

36. The eight cases taken into court in the Darrang division arose as follows:

A practice had grown up among the boat-cutters of the district of taking out a permit for one or two boats only, and felling and converting as many as they liked; and if caught, they generally offered to pay double royalty on the excess number. To put a stop to this system, eight cases were taken before the magistrate and convictions obtained in every case, the men being fined and their excess boats confiscated.

2. *Protection from Fire.*

General.

37. Last year a total area of 716,548 acres was brought under protection; during the year under review this area has been increased to 738,120 acres, out of which 700,104 acres were successfully protected. This amounts nearly to 95 per-cent. as compared with over 99 per cent. last year. The season was, however, most unfavourable owing to the absence of cold-weather rain and a prolonged drought in March and April. Other adverse influences were also at work in the Goalpara district, which is by far the most important as regards fire protection; these were cholera and small-pox, and difficulty in procuring labour. The cost of the work was still further reduced to Rs. 10,991, or Rs. 10-0-9 per square mile, as compared with Rs. 13-12-2 per square mile in 1892-93.

Divisional details.

38. The following statement gives the details of the fires that occurred in each district:

District.	Line-burning accidents.		Crossing from outside.		Hunting and shooting.		Unknown.		Incendiary.		Total.			
	Number of fires.	Acres burnt.	Number of fires.	Acres burnt.	Number of fires.	Acres burnt.	Number of fires.	Acres burnt.	Number of fires.	Acres burnt.	Number of fires.	Area burnt.	Area attempted.	Percentage of success.
												Acres.	Acres.	
Goalpara	2	35,900	...	...	...		1	7			3	35,907	434,382	91·7
Kamrup	2	230	...			...	...	..	...	..	2	230	89,264	99·7
Darrang ..	..	..	...	...	1	946		...	..	..	1	946	32,702	97·1
Nowgong ...	...	...	1	100	...			...	2	5	3	105	91,932	99·9
Garo Hills .. .	1	21	8	233	2	210	4	361	.	...	15	825	85,255	99·03
Khasi ,, ...	..	...	.	..	..	1	1	3			1	3	4,585	99·9
Total	5	36,151	9	333	3	1,156	6	371	2	5	25	38,016	738,120	94·85

In the Goalpara district a serious fire occurred in the Bijni reserve on the 5th January. A forester was attempting to burn a fire-line nine miles long from both ends at once, and he abandoned the work before the external fire was thoroughly extinguished. The area burnt on this occasion was 22,456 acres of Savannah, studded irregularly with soft wooded trees, and a few patches of Sissu and Khair. As complete measures for the protection of this tract from fire are not possible on account of the Bhutân frontier and for other reasons, this forest will in future be treated as one partially protected.

A second fire occurred on the 17th-18th February in the Janali and Moela blocks of the Ripu Working Circle, whereby 13,444 acres were burnt. In this case all the external lines had been most successfully burnt, and it was only owing to a severe thunderstorm accompanied by high winds which intervened a few hours after the last internal line had been burnt, that the fire crossed into the reserve and soon became wholly beyond the control of the establishment.

A third small fire on the 9th March in the Gumâ reserve was suppressed by the patrols before it had time to burn more than seven acres.

The origin of these fires has been satisfactorily explained by Mr. Campbell, and, taking into account the circumstances of the case, the unfavourable season, mortality among the population, &c., the results must be considered satisfactory, and they are better than those of any previous year, with the exception of 1892-93. No damage was done to any really valuable forest, although young Sâl reproduction on the edges of grass lands suffered.

In the Darrang district an area of 946 acres was burnt in the proposed addition to the Khalingdûar reserve Some coolies who were out hunting wounded a tiger, and they endeavoured to drive him out of some heavy grass by setting it on fire.

In the Garo Hills there were 15 fires, which chiefly originated from burning *jhums* outside the reserve. The areas in each case were small.

39. The average cost per square mile in the different divisions is exhibited in the following statement:

Cost.

Name of division.	1892-93.						1893-94					
	Of area attempted.			Of area protected			Of area attempted.			Of area protected.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p
Goalpara ...	10	4	8	10	6	3	6	7	6	7	0	10
Kamrup	21	9	5	21	10	3	12	1	6	12	2	3
Darrang	15	14	0	15	14	0	10	0	8	10	5	5
Nowgong ...	7	1	4	7	1	4	11	3	3	11	3	5
Garo Hills ...	21	9	9	21	10	1	13	11	5	13	13	7
Khasi „	138	12	0	138	14	4	134	11	2	134	12	7

In the Nowgong district the cost of fire protection has again increased to Rs. 11-3-5 per square mile of forest actually protected, and the Divisional Officer reports that the chief cause of this lies in the fact that, whereas in former years most of the work was performed by villagers without payment in return for free grants of forest produce, now many of the villages having been depopulated by *kala-dzar*, the work has to be paid for.

Another principal reason is undoubtedly the absence of a separate Divisional Officer for Nowgong. This has now been remedied, and it is hoped that the coming year's work will show better results.

In the Goalpara, Kamrup, Darrang, and Garo Hills districts the cost has been very materially reduced, and great credit is due to the Divisional Officers on this account. This decrease in expenditure is believed to be of a permanent nature, and is principally due to better supervision and to the establishment being more highly trained for the work.

3. *Regulation of grazing and Protection from Cattle.*

40. A reference to Form No. 54 shows that an area of 2,779 square miles of reserved forest was absolutely closed to grazing during the whole year, and an area of 904 square miles was open to all animals other than camels, goats, and sheep, during the twelve months. The grazing in those reserves which are open is very light, as only 674 animals grazed in them or on an average one animal per 1·34 square miles.

41. In the unclassed forests 12,962 buffaloes and 2,188 cows and bullocks paid grazing dues; but, as mentioned in last year's report, this does not include the whole number, as ryots graze their cattle free, and there is at present no means of ascertaining this number.

42. The grazing dues which amounted to Rs. 7,284 altogether are chiefly realised from Nepalese herdsmen at the rate of 8 annas per head of buffalo and 4 annas per other horned cattle. In the Darrang and Garo Hills districts the herdsmen refused, in some instances, to pay these dues, which were authorised on an executive order of the Chief Commissioner; and as matters stand at present, there is no law by which they can be made to pay, and no penalty to enforce payment. This will be regulated in the new rules which are now under the Chief Commissioner's consideration, and a clause will be inserted to make evasion of payment illegal.

(c) Improvement of Forest Growth.

1. *Natural Reproduction.*

43. The following remarks are extracted from Divisional Reports, as the Officiating Conservator has not been able to visit any of the forests during the short time he has held charge of the Circle.

Mr. Campbell writes regarding reproduction in Goalpara and the attacks of insects as follows :—

Goalpara

Further inspections of the forest confirm the views held of the rapid expansion of Sâl; many of the open glades show a gradation of all classes, and though there does not appear to be any encroachment on evergreen areas and only a limited invasion of mixed areas, this is adequately compensated for by extensions on grass lands. The visible extension, however, is due to the protection, affording suppressed seedlings opportunities for throwing out fresh shoots For three successive years the seed crop has been a failure, especially in the last two years, and many of the seedlings of 1892 were flooded last August and September and suppressed. Floods at the Bhur, Champamati, Pekua, and Sankos rivers killed out a large number of mature trees. Flowering of Sâl commenced early in February, and gave promise of a most abundant crop; but progress was somewhat arrested by bitter cold winds and driving rain at the close of that month which, however, benefited the seedling crop. The latter suffered severely during the ensuing drought. Seed formed and fell early in April, but only from about 5 per cent. of the whole area, the ravages of *Dasychira Thwaitesii* having defoliated partially or wholly every tree, the inflorescence participating in the general destruction.

The insect pest has been the feature of the year, the extent and variety being alarming, as no vegetation escaped them. Trees of the broad-leaved species were the special subject of attack, particularly the buds and new shoots; but even the linear blades of grasses and suffrescent shrubs like *Grewia sapida* received deliberate attention. Neither position, species, soil, nor description availed for protection, though certain conditions were more favoured than others.

It is roughly estimated that 800 square miles of trees were more or less defoliated by these pests. There is reason to believe that they are never wholly suppressed as other instances are recorded of serious damage done during exceptionally dry seasons. Reproduction of other timber is also very satisfactory, particularly of the *Terminalias*, *Michelia*, the *Albizzias*, *Bombax malabaricum*, &c., and along the banks of streams *Bischoffia javanica*. Sissu is expanding next in rapidity to Sâl, but Khair is more or less at a standstill, and appears to be retreating before the more vigorous Sissu.

Garo Hills

44 Mr. Long writes thus :—

The natural reproduction of Sâl which is by far the most important tree in the Garo Hills, is of a very varying nature. Throughout certain parts of some reserves young Sâl growth is entirely absent, while in adjoining forests (the soil environments of which are similar) dense crops of young Sâl growth are found. What the reason for this is, is unknown.

Experiments tried in 1892-93 to see whether it could be accounted for through the seeds from overmature trees (which constitute the chief stock of the upper hill forest) being unable to germinate freely and send up strong seedlings, showed that seeds from those old trees germinated freely, and that the seedlings resulting from these appeared to be in every way as strong as those resulting from seeds from young trees.

Nor is it that the undergrowth is too dense. Thick crops of young Sâl seedlings may be found in some reserves (notably the Songsack reserve) growing in *jhumed* land on which is a very dense crop of grass and scrub.

It was, however, noticeable in the Rongrengiri reserve that Sâl seedlings appeared more thickly under one sort of grass cover than under another; that one which was most favourable being called by the Garos "samin" and resembling in leaf a Kakua bamboo, and growing to a height of 7 or 8 yards.

Considerable damage was done in the autumn of 1893 to the Sâl in the Rongrengiri, Darugiri, and part of Dambu reserves by a caterpillar, no particulars of which, however, have been obtained. On the Sâl trees damaged in these reserves there was absolutely no flowering; and as in the Rongrengiri and Darugiri reserves nearly every tree was attacked, the damage, were it to be of frequent occurrence, would be of a very serious nature.

In the spring of this year some damage by caterpillars to Sâl was noticed in the Chima Bangsi reserve, many trees being stripped of their young leaves The caterpillar, however, ceased to be distinct about the 15th May, when it changed into a chrysalis, so that a new crop of leaves will be found and little damage done to the forest.

It has been a good seed year for the following reserved trees

Sâl (*Shorea robusta*);
Gamari (*Gmelina arborea*);
Makrin (*Schima Wallichii*)
Poma (*Cedrela Toona*);
Nahor (*Mesua ferrea*); and
Sida (*Lagerstræmia parviflora*).

Nowgong and Darrang.

45. In the Nowgong and Darrang Sal forests, we are told that natural reproduction is all that could be desired, and the young seedlings are establishing themselves, and look healthy and vigorous.

Cachar.

46. Mr. Barrett writes of Cachar that—

The natural reproduction of all classes of trees in all the reserves excepting the Inner Line has been good, and this is due to the fact that the system of marking trees before felling in all the reserves excepting the Inner Line has had the effect of closing the reserves to all traders in timber, and the period of rest thus allowed has been most beneficial, as most of the denuded areas are gradually becoming restocked, although the regeneration of trees in some places has been effectually prevented by dense crops of bamboos and useless undergrowth.

2. *Artificial Reproduction.*

47. In paragraph 60 of the Forest Administration Report for 1892-93, it was mentioned that a special report on the financial prospects of the Charduar plantation was submitted to the Government of India on the 29th April 1893. The result of this was that orders were received in May 1894, stopping all further extension of the area, as there were great doubts whether the expenditure would prove remunerative, and that even if it were so, many years would elapse before profits could be obtained.

Charduar rubber plantation.

Meanwhile, however, before these orders were received, Mr. Copeland had prepared 66 acres for planting and had actually planted up 41 acres with 372 plants. Vacancies in recent extensions were also filled up, and altogether 3,948 plants were put out, the total cost on upkeep and new work being Rs. 7,674.

48. The details of expenditure on the Charduar plantation during the year from 1st July 1893 to 30th June 1894 are given below:

Cost of year's work.

	Rs.	a.	p.
Establishment	7	0	0
Plantation fence, including guards for nurseries ..	1,365	2	0
Clearing old compartment lines, removing trees and stumps repairing mounds, renewing stakes, and levelling paths ..	2,881	10	0
Nurseries, fencing, weeding, draining, &c.	92	12	0
Planting out rubber trees, 865	245	3	0
Miscellaneous	201	11	10
Expenditure in compartment No. 12	65	8	0
Repairing plantation guard-houses	54	8	0
Expenditure on compartment No. 15	212	12	0
" " plantation paths	49	2	0
" " compartment No. 16	594	12	0
" " " No. 17	144	10	0
" " opening out new lines for extension ..	897	10	0
Replanting vacancies in new extension	861	9	6
Total	7,673	14	4

49. Appendix III gives details regarding the number and size of the plants in the nurseries, a comparative statement of expenditure during the last three years, the rainfall, and the measurements of rubber trees in the plantations of successive years. The nurseries contain, roughly, about 40,500 plants from 16 feet to 22 feet high, and these would suffice to plant out 2,400 acres. The new nursery contains 800 plants about one foot high on the average.

50. No expenditure was incurred on the Bamoni Hill plantation of 8 acres, containing 766 established rubber plants. This plantation was visited by the Officiating Conservator in July, and the system of tapping was explained to him by the Divisional Officer.

51. A sum of Rs. 392 was expended on the maintenance of the Kulsi plantation. Appendix II gives full details regarding the growth of the various trees cultivated.

Kulsi plantation.

52. The Nambor plantation of 168 acres was maintained at a cost of Rs. 80 spent on climber-cutting, the increase being apparently due to more complete clearing than in the previous year.

Nambor plantation.

53. Sal seed was sown among the terai bamboo in the Dambu reserve in lines 12 feet broad and 40 feet from line to line. The seed germinated freely, but the young plants were broken off level with the ground and trampled upon by wild animals going to and from the river to drink.

Garo Hills.

54. With regard to planting up *jhumed* land, the Divisional Officer (Mr. Long, writes as follows:

Sowing *jhum* land

The planting up of *jhumed* lands has not taken with the Garo, but there are hopes that a large area of Kakua bamboo forest in the Chima Bangsi reserve will be *jhumed* and planted up with Sâl on the high land and Ajhar on the low land next year.

In the Bagmara reserve an attempt was made to *jhum* and plant up with Ajhar (*Lagerstræmia Reginæ*) a strip of low-lying land on the banks of the Someswari river. When this was inspected in December 1893 about 60 or 70 Ajhar seedlings were found on 10 acres. The Garos will be allowed to *jhum* 10 to 15 acres annually of the low-lying strip of land on condition that they sow Ajhar after their *jhum* cultivation, and it is to be hoped that a good crop of Ajhar will be the result.

55. In Cachar a sum of Rs. 70 was spent on sowing Jarul seed in the Dhaleswari, Upper and Lower Jiri reserves with fairly good results, and the older seedlings in the Dhaleswari reserve are reported as doing well.

The Sylhet officer reports that Jarul and Cham seed were successfully sown over an area of 60 acres of *jhumed* land in the Langai and Singla reserve.

3. *Early Thinnings.*

56. There is not much to report under this head as actually having been done, but in Goalpara the question of thinning the dense young crop of Sâl seedlings in the Chirang reserve is attracting the attention of the Divisional Officer; and in Kamrup the Ajhar plantation of 1881 was thinned according to the Conservator's orders, as the growth was very thick.

4. *Other Operations for Improvement of the growing Stock.*

57. In the Kholahat reserve of the Nowgong division, climbers were cut over an area of 26 square miles at a cost of Rs. 197, and in the Garo Hills Rs. 105 was spent in freeing Sâl trees from climbers in six different reserves. Nothing under this head was done in the Goalpara division owing to scarcity of labour.

Climber-cutting.

5. *Experiments.*

58. No remarks.

(*d*) Exploitation of Major Forest Produce.

(2) *Selection Fellings.*

59. The selection method is carried out in the Goalpara and a few other districts, the trees being marked and recorded by forest officials before being sold. The method is very unpopular with the timbermen of the Goalpara district, and it is said that the year's outturn has been diminished thereby.

5. *Unregulated Fellings.*

60. There is nothing to add to the remarks made in last year's report under this head.

(*e*) Extraction and Transport of Major Forest Produce by Land and Water.

61. Almost all the produce of the Assam forests is worked out by purchasers, except in the Goalpara district, where some departmental work is carried out.

In the Kamrup division, two new depôts have been established in the Singra and Rani ranges to enable better supervision to be exercised over the export of forest produce from those two ranges. Sâl is the only timber for which there is a good demand, and the export takes the form of boats and *dhums* which are bought by Bengali traders, and floated down the river.

(*f*) Exploitation of Minor Forest Produce.

Extraction of Fodder.

62. There is no demand whatever for cut fodder except for a few elephants, as no cattle are stall fed in Assam.

2. *Grazing.*

63. Details of the number of cattle-grazing, and revenue realised, are given above in paragraphs 40-42. All the unclassed forests are open to grazing, but the quantity of cattle is infinitesimally small in comparison with the amount of pasturage available. Most of the reserves are closed to grazing. The collection of the dues in the Garo Hills is a work of great difficulty, as the herdsmen wander from place to place with their cattle in search of fodder, and frequently leave the district for another when called upon to pay the royalty. As soon as the new rules are published, the revenue under this head will increase.

3. *Miscellaneous Produce.*

64. The principal items of minor produce are rubber, cane, agar, lac, ivory, and thatching-grass.

Rubber

65. In the Darrang district, as explained in last year's report, paragraph 97, the lease of the rubber *mahal* terminated on the 31st March 1892, and the system of charging Rs 12 a maund royalty was introduced. The Divisional Officer is of opinion that hardly a rubber tree in the natural rubber forests will survive the treatment applied to them during the lease which lasted five years. No supervision was exercised over the tappers, and it is believed that most of the trees have been killed by root-tapping.

In 1892-93 an attempt was made to work rubber departmentally in the Darrang district, and about 23 maunds of rubber were thus collected. During the year under review, a contractor was allowed to work out rubber from the Government forests, on a royalty of Rs. 20 per maund, but he only managed to obtain about 9 maunds. This fact tends to prove that the amount of rubber available in the natural State forests has diminished, and that most of the yield comes from beyond the border.

Method of collecting the royalty.

66. The method of collecting the royalty of Rs. 12 per maund is as follows:—A license to collect and remove rubber is given to any one desiring it on payment of Rs. 10; another license to purchase rubber is issued on payment of Rs. 5; and finally a pass is issued on the shipment of the rubber at Rs. 12 a maund.

When an application to ship rubber is received, the counterfoil No. 1 of the pass-book is filled in; payment is then made, and foil No. 2 is written out, foil No. 3 being left blank. Foils Nos. 2 and 3 are then handed over to the applicant, who may ship his rubber at once, or delay doing so as he pleases. Whenever the rubber is conveyed to the steamer ghat, the forest official placed there for purposes of check, takes over the pass foils Nos. 2 and 3, and weighs the rubber, which is generally exported in double gunny bags, for which an allowance of 2 seers per bag is made on weighment. The rubber is then removed to the flat and stored there for the time being, and on the day of shipment the rubber is again weighed by the Steamer Company's Agent in the presence of the check forester, who fills up foil No. 3, which he gives to the shipper after noting and receiving the dues for any excess weight, and he returns foil No. 2 to the office for record.

Arrangements for checking the export.

67. Arrangements have recently been made with the Assam River Company to allow the forest officer of Dhubri to check all shipments of rubber at that station and to weigh them whenever he considers it necessary. It is probable that some rubber is shipped without paying the royalty to Government, especially from that portion of the Kamrup district which is situated on the north bank of the Brahmaputra; but it is hoped that the above arrangements, combined with a more efficient check in Kamrup, will prevent any illicit removal. The export of rubber as compared with that of the previous year will be found in paragraph 91.

Cane and Agar

68. The cane *mahaldar* in the Darrang district worked unsatisfactorily, and caused some trouble. His agent granted firewood in the permits issued for cane, and for this he was fined Rs. 50 by the Deputy Commissioner. There is also a "Pipul" *mahal* in this district, which brings in a revenue of Rs. 430 per annum. Agar *mahals* brought in Rs. 1,623.

Lac

69 Lac is exported from the east of the Garo Hills; but as it is cultivated exclusively on *jhumed* lands in unclassed State forests, we reap no benefit from it.

Ivory.

70. One hundred and forty-one seers of ivory, valued at Rs. 1,347, were exported from the Garo Hills during 1893-94, but only a very small portion of this was collected from the reserved forests, the revenue for whatever is collected from the unclassed State forests being credited to Land Revenue.

CHAPTER III.

GROSS YIELD AND OUTTURN OF FOREST PRODUCE.

(i) SUMMARY

71. The total outturn of the year in cubic feet is compared with the outturn as given in last year's report and with the corresponding period of 12 months as follows:

Class of forest.	1892-93 (fifteen months).						1892-93 (twelve months).		
	Timber in the rough logs.	Timber in the rough poles.	Sawn or squared timber.	Miscellaneous.	Fuel.	Total.	Timber in the rough logs.	Timber in the rough poles.	Sawn or squared timber.
From Reserved Forests	981,585	102,184	24,434	20,207	226,014	1,354,424	837,392	92,741	19,245
„ Unclassed „	1,437,144	54,405	268,273	229,502	2,668,806	4,658,130	1,198,395	32,600	205,913
Total	2,418,729	156,580	292,707	249,709	2,894,820	6,012,554	2,035,787	125,341	225,158

Class of forest	1892-93 twelve months)—*contd.*			1893-94 (twelve months).					
	Miscellaneous	Fuel.	Total.	Timber in the rough logs.	Timber in the rough poles.	Sawn or squared timber.	Miscellaneous	Fuel.	Total.
From Reserved Forests	18,146	133,076	1,100,600	617,869	158,303	63,220	07,992	314,408	1,245,692
„ Unclassed „	149,004	1,924,974	3,510,886	2,263,021	69,363	224,321	485,562	2,324,706	5,416,973
Total	167,150	2,058,050	4,611,486	2,904,890	227,566	287,541	553,554	2,689,114	6,662,665

This outturn was removed from the forests by the following agencies:

Agency of exploitation.	1892-93 (fifteen months).						1892-93 (twelve months).		
	Timber in the rough logs.	Timber in the rough poles.	Sawn or squared timber.	Miscellaneous.	Fuel.	Total.	Timber in the rough logs.	Timber in the rough poles.	Sawn or squared timber.
By Government Agency	61,904	29	350	5,752	1,286	69,321	45,279	17	16
„ Purchasers	1,880,487	88,994	292,357	142,879	446,446	2,860,157	1,574,690	57,854	224,09
„ Free grants	467,338	67,560	....	101,078	2,447,094	3,093,076	415,818	67,470	.
Total	2,418,729	156,580	292,707	249,709	2,894,820	6,012,554	2,035,787	125,341	225,158

Agency of exploitation.	1892-93 (twelve months)—*contd.*			1893-94 (12 months).					
	Miscellaneous.	Fuel.	Total.	Timber in the rough logs.	Timber in the rough poles.	Sawn or squared timber.	Miscellaneous.	Fuel.	Total.
By Government Agency	5,742	1,286	52,484	41,832	9	1,656	141 423	....	184,929
„ Purchasers	77,343	298,790	2,233,674	2,525,134	155,315	285,885	228,201	630,546	3,8[illegible],081
„ Free grants	84,086	1,757,974	2,325,328	337,924	72,242	....	183,930	2,058,568	2,652,664
Total	167,150	2,058,050	4,611,486	2,904,890	227,566	287,541	553,554	2,689,114	6,662,665

72. Nearly six and three quarter millions of cubic feet of timber of all descriptions were removed from the forests during the year, representing an increase over a similar period of the previous year of more than two millions cubic feet. This increase is due principally to an enhanced demand by purchasers who removed over 1½ millions cubic feet of timber more than in 1892-93.

Of the total outturn, about 5½ millions cubic feet, or 81 per cent., were obtained from the unclassed State forests, and the balance of 1¼ millions, or 19 per cent., came from the reserved forests.

The increased outturn is noticeable under all heads, but especially under "Miscellaneous," which more than trebled itself, the result mainly of improvement in trade in the Cachar and Sylhet divisions.

(ii) Departmental Operations.

73. The following statement exhibits the divisional working under this head for the last two forest years as well as for the fifteen months included in last year's report:

Name of division.	1892-93 (fifteen months)	1892-93 (twelve months)	1893-94	Increase.	Decrease.
	C. ft.	C ft.	C ft.	C. ft.	C. ft
Cachar	12,971	12,971	134,411	121,440	.....
Goalpara	45,442	28,817	38,973	10,156	.....
Kamrup	4,856	4,654	5,360	706	.....
Sibsagar	5,245	5,245	3,308	.....	1,937
Lakhimpur	.....	.....	2,804	2,804	.....
Garo Hills	807	797	64	.....	733
Total	69,321	52,484	184,920	135,106	2,670

Cachar

74. There is a marked increase during the year under report in timber and firewood, due to the fact that heavy floods in the Barak river brought down large quantities of drift logs which were collected departmentally, and disposed of under the rules in force. The cost during the year under A—III was Rs. 44 and the corresponding revenue Rs. 11,542. The total increase, as compared with the corresponding period of last year, amounts to 121,440 cubic feet.

Goalpara.

75. The outturn of timber from this division by direct agency amounted to 38,973 cubic feet, or 10,156 cubic feet more than last year during a similar period. The total sales reached 25,481 cubic feet, which shows a large increase on last year, but the foreign demand is very limited, and these sales were for local purposes. At the close of the year there were 62,070 cubic feet of logs in stock, of which 58,912 cubic feet had reached sale depôts, besides 255 trees felled and converted but still lying in the forest. A certain proportion of the sale depôt stock is inferior, and will have to be sold at a sacrifice. The cubic foot of timber landed in the sale depôt is estimated to cost 4 annas 4 pie, and the selling value, as derived from actual sales, 11 annas 9 pie. This shows a profit of 7 annas 5 pie as compared with the 4 annas realised on timber removed by purchasers.

Kamrup

76. In Kamrup no trees were felled for sale during the year, and only 95 Sâl trees were felled for departmental road works.

Sibsagar.

77. In Sibsagar the decrease is due to cessation of departmental operations in collection of drift timber, and in Lakhimpur the increase is due to a small collection of drift timber.

(iii) Removal of Produce by Purchasers.

78. There has been a very large increase in the outturn of timber removed by purchasers during the year, the following statement exhibiting a total of 3,825,081 cubic feet, as compared with 2,233,674 cubic feet during the corresponding period of 1892-93, or an increase of 71 per cent.:

Name of division.	1892-93 (fifteen months).	1892-93. (twelve months).	1893-94 (twelve months).	Increase.	Decrease.
	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
Cachar ...	644,535	534,449	875,033	340,584	.....
Sylhet	238,884	175,788	382,304	206,516	...
Goalpara	178,302	171,882	96,249	...	75,633
Kamrup	207,444	167,311	354,432	187,121	...
Darrang	393,852	304,909	302,374	.....	2,535
Nowgong	179,049	143,489	234,568	91,079	.....
Sibsagar ...	174,587	120,514	241,379	120,865	.....
Lakhimpur	668,763	498,396	1,161,165	662,769	.....
Khasi and Jaintia Hills ...	12,068	10,644	2,276	...	8,368
Garo Hills	162,673	106,892	175,301	69,009	.....
Total	2,860,157	2,233,674	3,825,081	1,677,943	86,536

This increase is principally due to an extension of the timber trade, to the supply of sleepers to the Assam-Bengal Railway, and to a large demand for waste land for tea cultivation, as will be seen from the following remarks for various divisions.

Cachar

79. In this division there is an increase of 340,584 cubic feet over the corresponding period of the previous year, and this is partly due to a largely increased trade in timber and firewood, and partly to the fact that whereas in previous years the calculations on waste land grants were made at acreage rates and the quantity of timber was not shown, in the year under review the number of cubic feet has been shown. The demand for firewood by tea planters has also increased the outturn.

Sylhet.

80. In this division the increase of 2 lakhs of cubic feet is attributed by the Divisional Officer to the valuation of timber on waste lands allotted for cultivation.

Goalpara.

81. The decrease of 75,633 cubic feet is due to a lessened foreign demand, to resistance on the part of traders to the application of strict sylvicultural principles, and to increased cost of extraction. The falling off is entirely in the class of logs in the rough, fuel and small poles showing an increase.

Kamrup.

82. The increased outturn in this division of 187,121 cubic feet is due principally to the supply of sleepers to the Assam-Bengal Railway. A firm of contractors undertook to supply 100,000 metre-guage sleepers to the Railway, partly at Gauhati, and partly at Dharamtul in the Kamrup division at certain rates. The Sál trees in the Kamrup division, however, on an average, produced only 15 sleepers, some of which were rejected for sapwood; and the contractors not finding the transaction profitable, ceased operations last April, and the Railway Company are now importing their sleepers from Bengal.

Nowgong.

83. The increase of 91,079 cubic feet is due to the working out of Sál sleepers for the Assam-Bengal Railway.

Sibsagar.

84. In this division there is an increase of 120,865 cubic feet, attributable partly to greater local demands, and partly to an increased outturn of timber and fuel from waste land grants.

Lakhimpur.

85. The large increase of 662,769 cubic feet in this division is due principally to extensive areas cleared for tea cultivation under the waste land rules.

Garo Hills.

86. The increase in the Garo Hills was due to a larger number of trees sold and boats worked out from unclassed State forests.

(iv) FREE GRANTS.

87. The following statement shows that about 26½ lakhs of cubic feet of timber were given away as free grants, being an increase of 327,336 cubic feet over the outturn of the corresponding period of the previous year:

Name of division.	1892-93 (fifteen months).	1892-93 (twelve months).	1893-94. (twelve months).	Increase.	Decrease.
	C. ft.	C ft.	C. ft.	C. ft.	C. ft.
Cachar	120,836	118,940	74,312	.....	44,628
Sylhet	1,288,108	750,796	1,355,954	605,158	.....
Goalpara	205,468	197,848	264,462	66,614	.....
Kamrup	293,090	79,910	90,710	10,800	.....
Darrang	284,724	264,884	327,162	62,278	.....
Nowgong	124,432	107,872	24,096	.....	83,776
Sibsagar	702,318	663,538	457,298	.....	206,240
Lakhimpur	154,100	141 540	58,330	.....	83,210
Khasi and Jaintia Hills ...	.....	.....	.....	.....	.....
Garo Hills	.....	.....	340	340	.....
Total ...	3,083,076	2,325,328	2,652,664	745,190	417,854

The large increase took place in the Sylhet district, where more home permits were issued to enable the inhabitants to rebuild villages largely damaged by a heavy flood in 1892-93.

The value of the timber is estimated to have been Rs. 73,854 as compared with Rs. 96,943 for the fifteen months of 1892-93, and with Rs. 80,381 for the last twelve months of that period. As explained in previous reports, these figures are not very reliable.

(v) GENERAL.

Shared forests.

88. The outturn from shared forests is compared in the following table. The total yield was 45,810 cubic feet more than during the fifteen months of 1892-93. The increase in the Garo Hills zamindari forests managed by Government is due to improvement in trade and to more careful inspection of these forests by the subordinate staff:

Name of division.	1892-93 (fifteen months).			1893-94 (twelve months).		
	Number of trees.	Pieces of dead wood.	Cubic feet.	Number of trees.	Pieces of dead wood.	Cubic feet
Garo Hills zamindari forests ...	182	.....	7,280	437	1	21,860
Khasi and Jaintia Hills shared forests	806	2,613	58,370	1,466	4,597	89,600
Total	988	2,613	65,650	1,903	4,598	111,460

Tea boxes.

89. The following statement shows the number of tea boxes made from timber obtained from Government forests in the Assam Valley since 1889-90:

Year.	Large boxes.	Medium boxes.	Small boxes.	Total number of boxes.	Cubic contents.	Royalty paid.
	No.	No.	No.	No.	C ft	Rs.
1889-90	95,293	1,021	9,670	105,984	75,898	6,305
1890-91	139,272	11,422	13,457	164,151	116,118	9,659
1891-92	257,296	24,738	21,890	303,924	214,097	17,792
1892-93 (15 months)	319,500	14,156	77,344	411,000	277,630	22,950
1892-93 (12 „)	.....	.....	.....	334,448	.....	18,654
1893-94	263,280	17,787	87,256	368,323	241,254	20,016

The outturn for last year was 368,323 boxes, being an increase of 33,875 over the corresponding period of the previous year. The boxes are made in various saw mills in the three districts of Lakhimpur, Sibsagar, and Darrang as under:

	Total boxes.	Total cubic feet.	Rs.
Lakhimpur	248,816	161,100	13,370
Darrang	89,935	60,198	4,996
Sibsagar	29,572	19,956	1,650

The wood principally used is the Simul *(Bombax malabaricum)*, though others, such as Holong *(Dipterocarpus pilosus)* and even Sal are employed where Simul cannot be had.

A report on this subject by the Officiating Conservator was submitted to the Inspector General of Forests under this office No. 130K., dated the 10th August 1894.

Rubber outturn.

90. The following table shows the outturn of rubber from Government forests to have been 778½ maunds in addition to 2,737 maunds imported from beyond the border:—

Division.	Home rubber.						Foreign rubber.					
	Quantity.			Value.			Quantity.			Value.		
	Md.	s.	ch.	Rs.	a.	p.	Md.	s.	ch.	Rs.	a.	p.
Cachar	.....	...					110	3	12	1,321	5	9
Goalpara	...						25	13	9	304	1	0
Kamrup .							75	0	0	900	0	0
Darrang ..	9	3	0	185	4	0	971	20	1	11,658	12	9
Sibsagar and Naga Hills ..	3	4	8	37	5	6	47	9	0	566	11	3
Lakhimpur ...	758	0	0	9,095	0	0	1,508	0	0	18,097	0	0
Khasi Hills	8	22	8	60	3	8	....					
Total	778	30	0	9,377	3	2	2,737	6	6	32,847	14	9

91. If we compare the outturn of the twelve months of 1893-94 with that of the fifteen months of 1892-93, we get the following table which shows a decrease of 587 maunds:—

Export of rubber from Assam compared for the last two years.

Division	Home rubber		Foreign rubber.		Total		Difference + or — in 1893-94
	1st April 1892 to 30th June 1893.	1st July 1893 to 30th June 1894.	1st April 1892 to 30th June 1893.	1st July 1893 to 30th June 1894.	Fifteen months 1892-93.	Twelve months 1893 94	
	Mds	Mds.	Mds.	Mds.	Mds.	Mds.	
Cachar	.....	.....	141	110	141	110	— 31
Goalpara	.....	.....	42	25	42	25	— 17
Kamrup	.....	.....	73	75	73	75	+ 2
Darrang	25	9	845	972	870	981	+ 91
Sibsagar and Naga Hills ...	56	3	.....	47	56	50	— 6
Lakhimpur	955	758	1,912	1,508	2,867	2,266	— 601
Khasi Hills	53	8	.....	.....	53	8	— 45
Total ...	1,089	778	3,013	2,737	4,102	3,515	— 587

The total amount exported during the twelve months was 3,515 maunds, as compared with 4,102 maunds during the fifteen months of 1892-93. If we take a proportion of the latter amounting to four-fifths, we get 3,281 maunds as representing the export during a similar period, which would show that the yield is not at present diminishing. The chief falling off is in the Lakhimpur district, and although the Divisional

Officer does not say a word about it in his report, though specially asked to do so, it is believed that the disturbed state of affairs caused by the Abor expedition led to a considerably smaller quantity of rubber being brought in from beyond our frontier.

92. The total revenue collected under this head was Rs. 42,225, as compared with Rs. 51,283 for the fifteen months of 1892-93. Here again if we take a proportion of four-fifths, we get Rs. 41,226 as the revenue for a corresponding period of 1892-93. But we must wait another year before any useful comparison can be made, and the new system of levying duty on the maund exported can be thoroughly tested. By that time also, the method of checking the exports and preventing illicit removal will be more completely established.

93. The following comparative table for the past five years shows the receipts from this head:

Division.	1889-90.	1890-91.	1891-92.	1892-93 (15 months).	1893-94 (12 months).
	Rs.	Rs.	Rs.	Rs.	Rs.
Cachar	.....	.....	.....	2,157	1,321
Goalpara	.....	.....	.....	509	304
Kamrup	.....	.....	.....	893	900
Darrang	21,005	21,005	21,005	12,275	11,844
Sibsagar ... ... / Naga Hills	517	517	270	673	604
Lakhimpur	10,600	.....	4,000	34,390	27,192
Khasi Hills	855	700	310	386	60
Total	32,977	22,222	25,585	51,283	42,225

94. The following statement shows the quantity of India-rubber carried by inland steamers and imported into Bengal from the several districts of Assam from the 1st July 1893 to the 30th June 1894:

Whence imported.	Imports from Assam into Bengal.		
	Viâ Brahmaputra.	*Viâ* Megna.	Total.
	Mds.	Mds.	Mds.
Goalpara	58	...	58
Kamrup	35	...	35
Darrang	780	...	780
Nowgong	...	...	...
Sibsagar	792	...	792
Lakhimpur	1,680	...	1,680
Sylhet	...	91	91
Cachar	...	5	5
Total	3,345	96	3,441

95. The following statement showing the imports of India-rubber into Assam in 1893-94 (forest year) has been supplied by the Director of Land Records and Agriculture, Assam:

Country from where imported.	1893-94. From 1st July 1893 to 30th June 1894.
	Mds.
Bhutan	31
Towang	130
Dafla Hills	328
Naga, Mishmi, and Singpho Hills	587
Lushai Hills	69
Manipur	...
Total	1,145

Bamboos

96. The yield in this produce is exhibited in the following statement :

Year	Number.		Value.	
	For trade	Free grant.	For trade.	Free grant.
			Rs.	Rs
1894-93 (15 months)	4,494,617	2,870,743	8,885	9,172
1892-93 (12 „)	4,177,989	2,093,155	7,967	6,854
1893-94 (12 „)	3,153,623	1,927,474	8,605	6,045
Difference	—1,024,366	—165,681	+638	—809

The decrease in the number sold amounting to over one million occurred chiefly in Sylhet.

97. The value of bamboos granted free of payment came to Rs. 6,045, or Rs. 809 less than in 1892-93, during a similar period.

Cane

98. There was a decrease in receipts from cane of Rs. 1,158 over the corresponding period of 1892-93, principally due to the first instalments of leases for the year under report having been paid into the treasury in the previous year.

Year	Trade permits.	*Mahal* contracts.	Total trade	Free grants.	Grand total.
	Rs.	Rs	Rs	Rs	Rs.
1892-93 (15 months)	3,272	3,767	7,039	3,002	10,041
1892-93 (12 „)	2,501	3,667	6,168	2,205	8,373
1893-94 (12 „)	2,779	2,496	5,275	1,940	7,215
Difference	+278	—1,171	—893	—265	—1,158

Agar

99 The Agar *mahal* yielded Rs. 1,623, as compared with Rs. 1,182 during the previous forest year. Of this amount, Rs. 1,023 was obtained in the Cachar division and Rs. 600 in Sibsagar.

Gurkhi permits.

100. The figures for the year show an unimportant decrease compared with the figures for twelve months of 1892-93 :

Nature of permits	1892-93 (15 months)				1892-93 (12 months)				1893-94			
	From Government forests		From zamindari forests		From Government forests		From zamindari forests		From Government forests		From zamindari forests	
	No.	Value	No.	Value	No	Value	No.	Value	No	Value.	No	Value.
		Rs		Rs.		Rs		Rs		Rs		Rs
Garo permits .	2,324	2,324	738	184	1,823	1,823	453	113	2,078	2,078	408	102
Foreign „ ..	5,360	10,720	3,994	1,997	4,806	9,612	3,887	1,944	4,103	8,206	4,365	2,182
Total	7,684	13,044	4,732	2,181	6,629	11,435	4,340	2,057	6,181	10,284	4,773	2,284

General export of timber and other forest produce from the Assam Valley.

101. Mr. Campbell, the Divisional Forest Officer at Dhubri, has furnished some interesting statistics regarding the export into Bengal from Assam of timber and other forest produce. A station was established at Dhubri some years ago for the registration of all timber, &c., exported, and the following table exhibits the figures from the year of institution :—

	Boats.		Logs.		Posts and pieces.		Bamboos.		Canes.		Reeds.		Thatching-grass.	
	Government.	Private.	Government.	Private.	Government.	Private.	Government.	Private.	Government.	Private.	Government.	Private.	Government.	Private.
	No.	No.	No.	No.	No.	No.	No.	No	Bundles.	Bundles	Bundles	Bundles.	C. ft.	C. ft.
1881-82 ..	....	....	....	....	....	.....	3,600	....	215,911	.....	39,942	800	6,422,300	647,800
1882-83 ..	....	....	....	....	....	...	2,100	....	334,850	100	108,342	515	7,370,000	3,150,300
1883-84 ..	985	25	9,873	3,752	39,356	226,326	6,544	....	225,570	30,890	30,678	2,706	922,222	121,244
1884-85 ..	826	9	37,113	27,303	43,104	209,933	9,900	....	88,379	7,200	28,350	800	311,511	24,666
1885-86 ..	577	49	27,702	25,572	8,679	309,501	22,330	....	327,424	19,935	75,676	9,300	613,011	178,583
1886-87 ..	828	4	13,786	14,410	30,217	320,868	21,320	4,500	273,779	65,870	32,030	2,800	816,388	488,688
1887-88 ..	1,388	8	21,912	10,169	36,160	296,431	20,917	....	220,835	49,620	43,416	20,923	1,013,551	701,102
1888-89 ..	2,125	2	39,067	31,057	6,480	299,305	12,304	10,600	193,607	63,810	44,337	13,995	725,181	751,943
1889-90	1,780	7	67,084	26,493	14,117	311,262	9,100	5,100	370,331	58,412	29,280	17,524	1,009,206	799,550
1890-91 ..	1,749	40	50,259	15,060	11,985	313,772	7,200	14,200	683,369	66,567	32,632	24,083	2,514,894	1,099,670
1891-92 .	1,035	7	26,663	10,703	8,126	337,861	250	20,600	325,465	27,800	43,376	14,017	1,793,412	936,278
1892-93 ..	2,602	28	39,474	9,242	8,433	355,111	17,842	7,300	783,489	25,625	36,068	20,605	1,081,188	572,660
1893-94	2,787	25	36,283	7,136	6,256	296,108	2,950	11,778	734,836	103,100	36,375	30,220	797,200	632,399
Total .	16,182	204	359,216	180,597	163,013	3,276,478	136,357	74,078	4,846,845	527,909	580,502	158,288	25,389,064	10,094,882
Average ..	1,471	19	32,656	16,418	14,901	297,862	10,488	16,582	372,834	43,992	44,654	12,177	1,953,005	776,529

The registration of boats, &c., commenced in 1883-84, and that of bamboos, canes, &c., two years earlier. The whole of this produce finds a market in Eastern Bengal. A few observations regarding each item separately, condensed from Mr. Campbell's report, may be of interest.

Boats.

102. These are made of Sâl and other first-class woods, and come almost entirely from Government forests of Central and Lower Assam and the Garo Hills. Private forests do not yield timber of sufficient size for boats.

Logs.

103. These are mostly 6 feet *dhums* used for boat-building in Eastern Bengal. With the exception of the year 1891-92, there has been a steady decline for the last five years, partly owing to steamer competition. The timber used is almost exclusively Sâl, and for large works this can be produced of larger size and at a lower cost from Nepal and Bengal.

Posts and pieces.

104. These are obtained from dead Sâl wood collected in Government forests and fellings of immature trees in the private forests of the Goalpara district, which will remain the chief source of supply, because they are more accessible, and immature fellings are not allowed in Government forests.

Bamboos.

105. These are chiefly obtained from old village sites where *Bambusa Tulda* and *Bambusa Balcooa* are cultivated with a few *Dendrocalamus Hamiltonii* from the moist forests. There has been a steady decrease in the number exported from Government forests.

Canes.

106. Canes come chiefly from the Lakhimpur and Sibsagar districts, and are exported in increasing quantity. In addition to other uses, canes are replacing jute in Eastern Bengal for tying the framework of roofs.

Reeds.

107. Reeds, which are the stems of a species of *Saccharum*, are used for the walls of houses, making fish barriers, &c., and are supplied chiefly from Goalpara and Kamrup, the destination being generally the riverine districts of Eastern Bengal.

Thatching-grass.

108. The exports of thatching-grass fluctuate according to the season and the influx of boats which come up for general trade purposes, and return with thatching-grass when more valuable cargoes are not to be had. Thatching-grass is supplied by the Goalpara and Kamrup districts, and its destination is Rangpur, Bagura, Pabna, and Mymensingh.

109. The following statement shows the percentage of each description of produce exported from Government and private forests respectively

Description.	For 13 years working.		For 1893-94.	
	Government.	Private.	Government.	Private.
Dug-outs	98·76	1·24	99·12	0·88
Logs	66 55	33·45	78·65	21·35
Posts and pieces .. .	4·77	95·23	2·07	97·93
Bamboos	49·78	50·22	20·03	79·97
Canes	89·45	10·55	87·70	12·30
Reeds	78 58	21·42	54·63	45·37
Thatching-grass	71 55	28·45	55·77	44·23

CHAPTER IV.

FINANCIAL RESULTS

110. The results of the past financial and forest years both compare favourably with those of the previous year, and it is gratifying to observe that the revenue is increasing notwithstanding the difficulties experienced for want of adequate permanent establishment required for efficient administration of the Department. The following figures show the receipts and charges of the past two financial years :

	Receipts. Rs.	Charges. Rs.	Surplus. Rs.
1892-93 (Financial)	3,82,829	2,64,073	1,18,756
1893-94 („)	4,88,497	2,68,223	2,20,274
Difference	+1,05,668	+4,150	+1,01,518

The revenue and expenditure of the last two forest years are given below. A column showing the actuals of twelve months from 1st July 1892 to 30th June 1893 has been added with a view to make a just comparison with the receipts and charges for the year under report :

	Receipts. Rs.	Charges Rs.	Surplus. Rs.
1892-93 (Forest 15 months)	4,76,620	3,36,060	1,40,560
1892-93 („ 12 „)	4,20,930	2,76,948	1,43,982
1893-94 („ 12 „)	4,92,811	2,65,421	2,27,390
Difference	+71,881	—11,527	+83,408

Compared with twelve months of 1892-93, the gross revenue of the past forest year increased by Rs. 71,881, and the surplus by Rs. 83,408. The surplus represents 46 per cent. of the gross revenue, as compared with nearly 30 per cent. last year and 20 per cent. in 1891-92.

Receipts.

111. The total receipts under the different main revenue heads are as follows :

Budget heads.	1892-93 (15 months). 1	1892-93 (12 months). 2	1893-94 (12 months) 3	Difference between columns 2 and 3.
	Rs.	Rs.	Rs.	Rs.
I. Timber and other produce removed from forests by Government agency... ...	8,836	6,517	17,990	+ 11,473
II. Timber and other produce removed from the forests by consumers or purchasers ...	3,55,906	3,14,341	3,78,840	+ 64,499
III. Drift and waifwood and confiscated forest produce	6,120	5,570	14,731	+ 9,161
IV. Revenue from forests not managed by Government	51,157	49,024	39,124	— 10,800
V. Miscellaneous	54,601	44,578	42,126	— 2,452
Total	4,76,620	4,20,930	4,92,811	+ 71,881

The revenue under I, II, and III shows a satisfactory increase. The falling off of Rs. 10,800 under IV is due to—

(*a*) Very little timber having been worked out from the Manipur forests.

(*b*) Disturbances in the Abor country.

(*c*) Revenue from shared forests managed by Government having been credited to head II instead of IV(*b*) in accordance with section 117 of the Forest Department Code.

The decrease under V resulted from the fact that in Sylhet fewer permits were sold in consequence of reduction of unclassed forest areas, especially in the Raghunandan hills, almost the whole of which it has been decided to give up for tea cultivation.

Expenditure.

112. The following statement exhibits the expenditure under different heads, compared with those of fifteen and twelve months of the previous year :

Budget heads.	1892-93. For fifteen months.	1892-93. For twelve months.	1893-94 (for twelve months).	Increase.	Decrease.
A.—Conservancy and Works.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Timber and other produce removed from the forests by Government agency ...	10,741	9,847	5,080	.....	4,767
II. Timber and other produce removed from the forests by consumers or purchasers ...	18,119	14,621	22,002	7,381	.....
III. Drift and waifwood and confiscated forest produce ...	445	363	177	.....	186
IV. Revenue from forests not managed by Government ...	1,046	1,037	1,587	550	.....
V. Rent of leased forests and payments to shareholders in forests managed by Government ..	...	.....	4,862	4,862	.....
VI. Live and dead stock ...	15,945	13,201	12,989	.....	212
VII. Communications and buildings...	16,730	13,808	17,185	3,377	.....
VIII. Demarcation, improvement, and extension of forests ...	83,658	68,755	42,302	.....	26,453
IX. Miscellaneous	4,605	3,615	2,914	.....	701
Total A.—Conservancy and Works ...	1,51,289	1,25,247	1,09,098	16,170	32,319
B.—Establishments.					
I. Salaries	1,49,573	1,23,350	1,28,087	4,737	.....
II. Travelling allowance ...	27,100	21,821	20,565	.....	1,256
III. Contingencies ...	8,098	6,530	7,671	1,141	.....
Total B.—Establishments ...	1,84,771	1,51,701	1,56,323	5,878	1,256
Grand total of Expenditure ...	3,36,060	2,76,948	2,65,421	22,048	33,575

The increase under A—IV and B—III is small, and requires no explanation. The increase of expenditure under A—II, V, VII, and B—I is due to the following reasons :

A-II.—Employment of more temporary establishment required for valuation of timber on waste lands granted for special cultivation.

A-V.—Charging under this head the share of revenue derived from shared forests managed by Government.

A-VII.—Thorough repairs to Gauhati Forest Bungalow, construction of new houses at Bilasipara sale depôt, and opening out of a diversion of the Dambu-Damra cart road.

B-I.—Payment of exchange compensation and officiating allowances to Divisional Forest Officers.

The decrease under A—I and VIII is chiefly owing to little departmental timber work done in the Goalpara division and to cessation of survey and working plans operations in the same division. The decrease under other heads is small, and requires no remarks.

113. Details of receipts and expenditure of the different divisions, as compared with those of fifteen and twelve months of the previous forest year, are exhibited in the following statement :

Divisional details

Name of division	Receipts.			Expenditure.			Difference.		
	1892-93		1893-94, for 12 months	1892-93		1893-94, for 12 months.	1892-93		1893-94, for 12 months between columns 3 and 6.
	For 15 months	For 12 months.		For 15 months.	For 12 months.		For 15 months between columns 1 and 4.	For 12 months between columns 2 and 5.	
	1	2	3	4	5	6	7	8	9
	Rs	Rs.	Rs	Rs.	Rs	Rs	Rs	Rs	Rs.
Direction ...	443	893	1,262	30,229	24,130	32,972	— 29,786	— 23,837	— 31,710
Working Plans .	25	25	....	27,281	22,497	388	— 27,256	— 22,472	— 388
Cachar	86,314	79,117	1,02,311	24,152	20,407	20,329	+ 65,062	+ 58,710	+ 81,982
Sylhet ...	66,233	53,799	57,037	16,040	13,230	13,360	+ 50,193	+ 40,569	+ 44,577
Goalpara ..	43,213	41,979	50,288	70,492	56,487	45 013	— 27,279	— 14,508	+ 5,275
Kamrup .	71,711	63,861	68,149	40,662	30,032	34,699	+ 31,049	+ 32,929	+ 33,450
Darrang .	37 542	34,790	27,775	38 699	35,580	33,343	— 1,157	— 790	— 5,568
Nowgong	10,670	16,836	36,299	13,016	10,480	11,470	+ 6,654	+ 6,356	+ 24,829
Sibsagar and Naga Hills	2 472	15,816	19,290	14,068	11,868	11,870	+ 8,404	+ 3,948	+ 7,420
Lakhimpur	88,346	79,686	90,813	32,195	7 06	29,274	+ 56,151	+ 52,619	+ 61,559
Khasi and Jaintia Hills ..	1,857	1,872	1,325	3,440	[illegible]	2,847	— 1,583	— 1,017	— 1,522
Garo Hills	35,894	32,916	37,342	15,786	21, 41	29,856	+ 10,108	+ 11,475	+ 7,486
Total	4,76,620	4,20,930	4,92,811	3 36,060	2,76,948	2,65,421	+1,40,560	+1,43,982	+ [illegible]7,390

114. The following statement shows the changes in the surplus or deficit of each division for the last two forest years (twelve months) :

Name of division	Surplus (+) or deficit (—) for 12 months, 1892-93	Surplus (+) or deficit (—) for 1893-94	Increase or decrease in surplus in the two years
	Rs.	Rs	Rs.
Direction	—23,837	—31,710	— 7,873
Working Plans .	—22,472	— 388	+22,084
Cachar ...	+58,710	+81,982	+23,272
Sylhet .	+40,569	+44,577	+ 4,008
Goalpara ...	—14,508	+ 5,275	+19,783
Kamrup ...	+32,929	+33,450	+ 521
Darrang ..	— 790	— 5,568	— 4,778
Nowgong ...	+ 6,356	+24,829	+18,473
Sibsagar and Naga Hills .	+ 3,948	+ 7,420	+ 3,472
Lakhimpur .	+52,619	+61,559	+ 8,940
Khasi and Jaintia Hills ..	— 1,017	— 1,522	— 505
Garo Hills	+11,475	+ 7,486	— 3,989
Total	+1,43,982	+2,27,390	+83,408

115. There has been a satisfactory increase of surplus in the Cachar, Nowgong, and Lakhimpur divisions owing to the development of the timber trade and supply of sleepers to the Assam-Bengal Railway.

In the Goalpara division the deficit of Rs. 14,508 in 1892-93 (forest year of twelve months) has been changed into a surplus of Rs. 5,275 during the year under review, due to largely increased sales of departmental timber and to a decrease in expenditure owing to cessation of survey work.

In the direction division, the expenditure increased on account of leave and compensation allowances, due to Messrs J. A. McKee and R. H. M. Ellis having been paid and charged in that office. The deficit in the Darrang division increased from Rs 790 to Rs. 5,568 owing to a very small quantity of rubber having been collected and sold departmentally, and to the dullness of the market.

The differences in the other divisions are small and call for no remarks.

116. The value of live and dead stock including timber was Rs. 1 88,308 as compared with Rs. 1,83,181 at the commencement of the year, The amount outstanding against contractors and disbursers at the close of the year was Rs. 43,071 as against Rs. 41,278 at the commencement of the year. There has been a slight increase in the outstanding revenue, but the security for payment of the same is sufficient.

CHAPTER V.

FOREST ADMINISTRATION.

ESTABLISHMENT.

117. Mr. R. H. M. Ellis was in charge of the circle, as a temporary measure, from the 1st July 1893 to the 7th August; and Mr. J. A. McKee resumed charge on the 8th August, and remained in charge until the 1st April 1894. Mr. A. Smythies took over charge on the 2nd April, and continued to hold charge to the end of the year.

Transfers.

118. Mr. H. S. Ker Edie, Assistant Conservator of Forests, was transferred from the Central Provinces, but he did not join till after the close of the year.

Leave.

119. Mr. J. A. McKee was on privilege leave from the 1st July to the 7th August, Mr. E. E. Fernandez obtained two years' furlough from the 8th June 1894, and relinquished his post in the Baroda State. Mr. R. H. M. Ellis obtained five weeks' privilege leave from the 8th August 1893.

Mr. W. F. Lloyd obtained nine months' furlough on medical certificate with effect from the 24th September 1893.

Mr. H. G. Young was granted one year's furlough from the 4th April 1894.

Babu Jogeswar Sur obtained one year's furlough from the 16th August 1893.

Promotions.

120. Mr. H. S. Ker Edie, who joined the circle from leave on medical certificate, on transfer from the Central Provinces after the year was over, was promoted to the first grade of Assistant Conservators (provisional), with effect from the 10th January 1894.

Mr. A. M. Long was promoted to first grade (provisional) of Assistant Conservators from the 8th May 1894.

Babu Tarakisor Gupta was promoted to the second grade of Extra Assistant Conservators from the 11th May 1894.

Babu Upendra Nath Kanjilal was confirmed in the fourth grade of Extra Assistant Conservators from the 1st June 1893.

Examinations.

121. Mr. A. M. Long, Assistant Conservator of Forests, and Babu Kripa Nath De, Extra Assistant Conservator, passed in Assamese by the higher standard. Mr. F. E. B. Lloyd, Assistant Conservator, and Babus Tarakisor Gupta and Upendra Nath Kanjilal, Extra Assistant Conservators, passed in Procedure and Accounts; the latter passed in Forest Law, and Babu Kripa Nath De in Land Revenue.

Detail of Charges.

Division.	Name of Officer.	Date. From	Date. To
Cachar	Mr. J. E. Barrett ...	Throughout the year.	
Sylhet	Babu Tarakisor Gupta ...	Ditto.	
Goalpara ...	Mr. T. J. Campbell ...	Ditto.	
Kamrup	„ H. G. Young ...	1st July 1893 ...	3rd April 1894.
„	Babu Nilkanta Mukharji	4th April 1894 ...	End of year.
Darrang ...	Mr. D. P. Copeland ...	Throughout the year.	
Nowgong ...	Ditto ...	Ditto.	
Sibsagar ...	Mr. A. M. Long ...	1st July 1893 ...	31st July 1893.
	„ W. F. Lloyd ...	1st August 1893 ...	12th September 1893.
	„ R. H. M. Ellis ...	13th September 1893.	End of year.
Lakhimpur ...	„ W. F. Lloyd ...	1st July 1893 ...	12th September 1893.
	„ R. H. M. Ellis ...	13th September 1893.	End of year.
Garo Hills ...	Babu Jogeswar Sur ...	1st July 1893 ...	15th August 1893.
	Mr. A. M. Long ...	16th August 1893 ...	End of year.
Working plans ...	„ W. F. Lloyd ...	1st July 1893 ...	17th September 1893.

122. Mr. W. F. Lloyd, Deputy Conservator of Forests, returned from furlough and joined the direction office on 14th June 1894, to which he has been attached on special duty. Mr. F. E. B. Lloyd appointed as Assistant Conservator, second grade, from Cooper's Hill, joined the Department on 6th December 1893, and was attached to the Goalpara division till the end of the year.

The paucity of officers is felt when leave even for short periods is granted to them owing to illness or other causes. The Nowgong and Sibsagar divisions were held by officers in charge of other divisions, and important forest works could not, therefore, be properly attended to in either of them. Since Mr. W. F. Lloyd proceeded home on leave, the work of the Working Plans Division devolved on the Conservator himself in addition to his own duties.

Executive and subordinate staff.

123. The writer of the present report fully endorses the opinion expressed by his predecessor, Mr. McKee, that the strengthening of the executive and subordinate staff is essentially necessary for the efficient administration of the Department, and he has moved the Local Government again in connection with the proposed reorganization of the subordinate establishment.

124. Forest Ranger Sarat Chandra Ray died of *kala-azar*, which he contracted in the Garo Hills division. A forester also died of cholera.

Three foresters were reduced, one forester was dismissed, two foresters resigned, one forester was suspended and afterwards reinstated.

Students for Dehra Dun Forest School.

125. Under sanction of Government two students were deputed during the year for training at the Imperial Forest School at Dehra Dun. One of them is a B.A. of the Calcutta University, and the other is a forester already on the establishment. There are now five students in training from Assam, and it is intended to apply for sanction to select two candidates every year, besides sending such members of the establishment as are likely to benefit by the excellent training there offered. Of the value of this training there can be no two opinions, and the future well-being of the Assam forests

will in a great measure depend on the quality and quantity of trained rangers that are put in charge of the more important ranges. The difficulty is to select men with the requisite constitution and physique, combined with a sufficiently high standard of education.

Services of officers and subordinates.

126. In conclusion, the Officiating Conservator has much pleasure in being able to record his appreciation of the good work done by the majority of the divisional officers serving under his orders, and the names of Messrs. D. P. Copeland, T. J. Campbell, J. E. Barrett, and W. F. Lloyd deserve special acknowledgment. Mr. A. M. Long is a promising officer, and has shown great zeal and success in the management of the Garo Hills division.

127. Babu Kripa Nath De, Extra Assistant Conservator, and Babus Nilkanta Mukharji, Jnanada Charan Sen, Ram Nath Mukharji, and Guru Charan Das, forest rangers, have done good work, and have been favourably reported on by their Divisional Officers.

128. The Officiating Conservator would also desire to acknowledge the good services of his office staff ably conducted by the Superintendent Babu Kartik Chandra Chatterji.

A. SMYTHIES,

Officiating Conservator of Forests, Assam.

STATEMENTS.

FORM No. 46.

FOREST DEPARTMENT, ASSAM.—AREA OF RESERVED AND UNCLASSED FORESTS FOR 1893-94.

Division.	Range.	Civil district or territory	Name of forest.	Area on 1st July 1893.		Added during the year	Excluded or transferred to other heads.	Area on 30th June 1894.		No. and date of notification of addition or transfer.
				Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles	
			(a) RESERVED FORESTS.							
Cachar ...	Sonai	Cachar district ...	Upper Jiri	15,360	24	...	...	15,360	24	
" ...	"	" " ...	Lower "	9,002	14	...	...	9,002	14	
" ...	"	" " ...	Barak	47,830	75	...	...	47,830	75	
" ...	"	" " ...	Sonai	11,520	18	...	..	11,520	18	
" ...	" and Matijuri	" " ...	Inner Line	325,760	509	...	...	325,760	509	
" ...	Matijuri	" " .	Katakhal ...	51,200	80	...	...	51,200	80	
" ...	—	" " ...	Dhaleswari	20,451	32	...	...	20,451	32	
			Total	481,123	752	...	...	481,123	752	
Sylhet ...	Patharkandi ...	Sylhet district	Langai and Singla ...	108,800	170	...	...	108,800	170	
			Total	108,800	170	...	...	108,800	170	
Goalpara ...	Guma	Goalpara district ...	Guma	15,776	25	1,261	...	17,037	27	5926R, dated the 2nd August 1893.
" ...	Western . ..	" " ...	Ripu	186,632	292	8	36 051	150,589	235	
" ...	Eastern ...	" " ...	Chirang	112,960	176	35,301	...	148,261	232	
" ...	"	" " ...	Bengtol	11,325	18	3,010	...	14,335	22	
" ...	"	" " ...	Bhumeswar Hill	4,033	6	147	..	4,180	7	
" ...	"	" " ...	Bijni	99,980	156	25,530	...	125,510	196	2614R, dated the 15th June 1894
			Total	430,706	673	65,257*	36,051†	459,912	719	

* 26,138 acres new addition.
39,119 " rectification
† by rectification

FORM No. 46—*continued.*

Division.	Range.	Civil district or territory.	Name of forest.	Area on 1st July 1893.		Added during the year	Excluded or transferred to other heads	Area on 30th June 1894.		No. and date of Notification of addition or transfer.
				Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
Kamrup	Kulsi ...	Kamrup district ...	Barduar	15,896	25	247	...	16,143	25	No. 8942R., dated the 2nd December 1893.
" ...	" ...	" " ...	Pantan	21,910	34	...	...	21,910	34	
" ...	" ...	" " ...	Kulsi plantation	3,680	6	308	...	3,988	6	No. 8926R., dated the 1st December 1893.
" ...	" ...	" " ...	Mimilia	3,610	6	904	...	4,514	7	No. 1231R., dated the 22nd March 1894.
" ...	" ...	" " ...	Mayang	4,800	7	...	...	4,800	7	
" ...	" ...	" " ...	Chhaygaon	2,705	4	...	...	2,705	4	
" ...	Jirang ...	" " ...	Mataikhar	2,240	4	...	...	2,240	4	
" ...	Rani ...	" " ...	Jara	1,037	2	...	...	1,037	2	
" ...	" ...	" " ...	Rani	11,035	17	...	...	11,035	17	
" ...	" ...	" " ...	Kawasing	3,570	6	...	...	3,570	6	
" ...	Singra ...	" " ...	Simla Hills	317	...	...	...	317	...	
" ...	" ...	" " ...	Dumpara	497	1	...	...	497	1	
" ...	" ...	" " ...	Khaki, Sikrabura Hills ...	2,530	4	...	...	2,530	4	
" ...	" ...	" " ...	Ghoraputa	120	...	...	...	120	...	
" ...	" ...	" " ...	Khatkhati Hills	644	1	...	...	644	1	
" ...	" ...	" " ...	Taraibari	806	1	...	...	806	1	
" ...	" ...	" " ...	Garubaldha	240	...	...	...	240	...	
" ...	" ...	" " ...	Khurkhuri	149	...	...	...	149	...	
" ...	" ...	" " ...	Sursuria Hills	970	2	...	...	970	2	
" ...	" ...	" " ...	Gizang	930	1	3,840	...	4,770	7	No. 1570R., dated the 16th April 1894.
" ...	" ...	" " ...	Jaipur	774	1	50	...	824	1	Ditto, ditto.
" ...	" ...	" " ...	Barodobha	1,190	2	...	...	1,190	2	
" ...	" ...	" " ...	Nampathar	640	1	...	...	640	1	
" ...	" ...	" " ...	Borjuli	1,120	2	...	...	1,120	2	
" ...	Northern ...	" " ...	Hajo	243	...	...	...	243	...	
" ...	" ...	" " ...	Mugakhal	...	...	284	...	284	...	No. 1192R., dated the 19th March 1894.
" ...	" ...	...	Jharikhuri	...	...	1,978	...	1,978	3	Ditto, ditto.
			Total	81,653	128	7,611	...	89,264	139	

Darrang	Western	Darrang district	Khalingduar	13,212	21	...	...	13,212	21
"	Central	" "	Balipara	56,224	88	...	...	56,224	88
"	"	" "	Charduar	66,983	105	...	...	66,983	105
"	"	" "	Bhamaraguri	386	1	...	...	386	1
"	"	" "	Gorumari	205	...	...	...	205	...
"	"	" "	Singri Hill	1,200	2	...	...	1,200	2
"	Eastern	" "	Nowduar	52,480	82	...	...	52,480	82
			Total	190,690	298	...	...	190,690	298
Nowgong	Western	Nowgong district	Kholahat	16,848	26	...	...	16,848	26
"	"	" "	Rangkhong	6,339	10	...	...	6,339	10
"	"	" "	Sonaikusi	10,754	17	...	...	10,754	17
"	Eastern	" "	Doboka	29,014	45	...	...	29,014	45
"	"	" "	Diju	5,742	9	...	...	5,742	9
"	"	" "	Suang	6,612	10	...	...	6,612	10
"	"	" "	Bamuni	449	1	...	...	449	1
"	"	" "	Jungthung	8,047	13	...	...	8,047	13
"	"	" "	Sildharampur	4,191	7	...	...	4,191	7
"	"	" "	Kukrakata Hill	3,936	6	...	...	3,936	6
			Total	91,932	144	...	...	91,932	144
Sibsagar	Sibsagar	Sibsagar district	Diroi	11,783	18	...	...	11,783	18
"	"	" "	Abhaypur	16,637	26	...	...	16,637	26
"	"	" "	Sola	1,778	3	...	...	1,778	3
"	Jorhat	" "	Halangapar	4,912	8	...	...	4,912	8
"	"	" "	Desoi	6,912	11	...	...	6,912	11
"	Golaghat	Naga Hills district	Nambar	249,312	390	...	...	249,312	390
"	"	" " "	Mikir Hills	51,840	81	...	...	51,840	81
"	"	" " "	Upper Daigurung	5,312	8	...	...	5,312	8
"	"	" " "	Lower "	5,120	8	...	...	5,120	8
"	"	" " "	Kalioni	51,840	81	...	...	51,840	81
"	"	" " "	Diphu	42,080	66	...	...	42,080	66
"	"	" " "	Rengma	34,400	54	...	...	34,400	54
"	"	" " "	Doyang	60,875	95	...	...	60,875	95
			Total	542,801	848	...	...	542,801	848
Lakhimpur	Dibrugarh	Lakhimpur district	Dehingmukh	13,747	21	...	...	13,747	21
"	"	" "	Jokai	11,858	19	...	...	11,858	19
"	"	" "	Dibru	56,189	88	...	...	56,189	88
"	North Lakhimpur	" "	Bhorolowah	5,280	8	...	...	5,280	8
"	" "	" "	Kuddum	13,626	21	...	...	13,626	21
"	Makum	" "	Upper Dehing	148,691	232	...	...	148,691	232
"	"	" "	Jaipur	24,985	39	...	...	24,985	39
			Total	274,376	429	...	...	274,376	429

FORM No. 46—*concluded.*

Division.	Range.	Civil district or territory.	Name of forest.	Area on 1st July 1893.		Added during the year.	Excluded or transferred to other heads.	Area on 30th June 1894.		No. and date of notification of addition or transfer.
				Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
Khasi and Jaintia Hills.	Jowai	Khasi and Jaintia Hills district.	Saipung	32,000	50	...	...	32,000	50	
" ...	Shillong	" "	Riat Khwan	967	2	...	...	967	2	
			Total	32,967	52	...	...	32,967	52	
Garo Hills ...	Northern	Garo Hills district ...	Jinari	6,640	10	...	...	6,640	10	
" ...	"	" " ...	Chima and Bangshi	8,680	14	...	...	8,680	14	
" ...	"	" " ...	Dhima	5,760	9	...	...	5,760	9	
" ...	"	" " ...	Dilma	1,120	2	...	...	1,120	2	
" ...	"	" " ...	Rajasimla	4,800	7	...	...	4,800	7	
" ...	"	" " ...	Ildek	1,280	2	...	...	1,280	2	
" ...	"	" " ...	Darugiri	2,448	4	...	...	2,448	4	
" ...	"	" " ...	Rangrengiri	8,860	14	...	...	8,860	14	
" ...	"	" " ...	Dambu	4,364	7	...	...	4,364	7	
" ...	"	" " ...	Sangsak	8,005	13	...	...	8,005	13	
" ...	Southern	" " ...	Emangiri	2,080	3	...	...	2,080	3	
" ...	"	" " ...	Rewak	1,280	2	...	...	1,280	2	
" ...	"	" " ...	Siju	1,280	2	...	...	1,280	2	
" ...	"	" " ...	Bagmara	12,320	19	...	...	12,320	19	
" ...	"	" " ...	Angratoli...	9,138	14	...	...	9,138	14	
" ...	Western	" " ...	Dibru Hill	6,080	9	...	...	6,080	9	
" ...	"	" " ...	Bolsalgiri...	640	1	...	...	640	1	
" ...	"	" " ...	Tura	480	1	...	...	480	1	
			Total	85,255	133	...	...	85,255	133	
			Total Reserved Forests ...	2,320,303	3,625	72,868	36,051	2,357,120	3,683	

			(b) UNCLASSED STATE FORESTS AND WASTE LANDS.						
Cachar ...	.....	Cachar district ...	Within revenue limits ...	344,487	538	...	5,888	338,599	529
Sylhet ...	.....	Sylhet " ...	" " " ...	154,560	241	...	1,281	153,279	239
Goalpara ...	.....	Goalpara " ...	" " " ...	513,490	802	...	30,674	482,816	754
Kamrup ...	.....	Kamrup " ...	" " " ...	321,496	502	...	7 611	313,885	490
Darrang ...	.....	Darrang " ...	" " " ...	121,952	191	18,847	20,962	119,837	187
Nowgong ...	.....	Nowgong " ...	" " " ...	136,132	213	...	...	136,132	213
Sibsagar ...	.....	Sibsagar " ...	" " " ...	238,835	373	...	1,999	236,836	370
Lakhimpur ...	.....	Lakhimpur "	" " " ...	1,324,678	2,070	11,798	39,355	1,297,121	2,027
Cachar ...	.....	Cachar " ...	Beyond " " ...	135,040	211	...	...	135,040	211
Lakhimpur ...	.....	Lakhimpur " ...	" " " ...	929,920	1,453	...	...	929,920	1,453
Naga Hills ...	.....	Naga Hills " ...	" " " ...	146,423	229	...	...	146,423	229
Khasi and Jaintia Hills	.....	Khasi and Jaintia Hills district.	" " " ...	64,000	100	...	...	64,000	100
Garo Hills ...	.....	Garo Hills district	" " " ...	138,745	217		...	138,745	217
			Total Unclassed State Forests and Waste Lands.	4,569,758	7,140	30,645*	107,770†	4,492,633	7,020
			Grand total	6,890,061	10,766	103,513	143,821	6,849,753	10,703

* By grants relinquished
† 33,749 acres declared reserve
74,021 " allotted for cultivation

FORM No. 47.

FOREST DEPARTMENT, ASSAM.—STATEMENT SHOWING THE PROGRESS MADE IN, AND THE EXPENDITURE INCURRED ON, FOREST SETTLEMENTS DURING 1893-94.

Name of forest division.	Name of civil district or territory.	Area already settled at commencement of the year, in square miles.	Areas finally settled during the year.						Areas undergoing settlement.					
			No. and date of Government order according final sanction to the settlement.	Name of forest settled.	Area, in square miles.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.	At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.	
						In Forest accounts.	In other accounts.		Name of tract.	Area, in square miles.	Name of tract.	Area, in square miles.	In Forest accounts.	In other accounts.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
						RESERVED FORESTS.								
Cachar ...	Cachar ...	752	.....	.....	.....	.....	.....	.....	Kopili Diyang ...	299·00	.....	.....	.....	.....
									Gunjong	209·00	.....	.....	.....	.....
Sylhet ...	Sylhet ...	170	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Goalpara ...	Goalpara ...	678*	5926, dated the 2nd August 1893.	Guma	·95	.....	.....	.....	.....	.....	.....	.....	.....	.....
			2614, dated the 15th June 1894.	Bijni	39·89	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kamrup ...	Kamrup ...	128	1102R., dated the 13th March 1894.	Mugakhal	0·44	.....	.....	.....	.....	.....	Darranga ...	8·5	.....	.....
				Jharikhuri	3·09	.....	.....	.....	.....	.....	Subankata ...	7·00	.....	.....
			1570R., dated the 16th April 1894.	Addition to Jaipur ...	0·08	.....	.....	.....	.....	.....	.....	.....	.....	.....
				Addition to Gizang ...	6·00	.....	.....	.....	.....	.....	.....	.....	.....	.....
			8926R., dated the 1st December 1893.	Kulsi... ...	0·48	.....	.....	.....	.....	.....	.....	.....	.....	.....
			1231R., dated the 22nd March 1894.	Second, third, and fourth addition to Milmili reserve.	1·41	.....	.....	.....	.....	.....	.....	.....	.....	.....
			8942R., dated the 2nd December 1893.	Barduar reserve ...	0·39	.....	.....	.....	.....	.....	.....	.....	.....	.....
Darrang ...	Darrang ...	298	.....	.....	.....	.....	.....	.....	.....	.....	Addition to Khalingduar reserve.	6·5	.....	.....

									Second addition to Doboka reserve.	3·34	.....	.....	.....	.....
									Nomati	189·00	.....	.....	.....	.....
Nowgong ...	Nowgong ...	144	.....	.....	.....	.....	.....	.....	Addition to Rangkhang reserve.	95·00	.....	.....	.....	.....
									Borkola	2·40	.....	.....	.....	.....
									Western Mikir Hills ..	96·00	.....	.....	.....	.....
Sibsagar ...	Sibsagar ...	848	.....	.....	.....	.....	.....	.....	Panidehingia ...	30·00	.....	.....	.....	.....
Lakhimpur ...	Lakhimpur ...	429	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Khasi and Jaintia Hills.	Khasi and Jaintia Hills.	52	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
											First, second, and third addition to the Songsac reserve.	28·25	.....	.....
											First and second addition to the Rajasimla reserve.	0·17	.....	.....
Garo Hills ...	Garo Hills ...	133	.....	.....	.....	.....	.....	.....	.....	.....	First addition to Dambu reserve.	0·24	.....	.....
											First addition to the Dhima reserve.	0·99	.....	.....
											First, second, third, and fourth addition to the Chima Bangshi reserve.	1·69	.....	.....
	Total ...	3,625	.....	.....	52·73	.....	.....	.....	.....	933·74	.....	53·34	.....	.....

* The addition of 5 square miles is due to resurvey.

FORM No. 48..

FOREST DEPARTMENT, ASSAM.—RECORD OF DEMARCATION AND MAINTENANCE OF BOUNDARIES, 1893-94.

Division	Length of boundaries artificially demarcated during the year	Length of previously existing boundaries repaired.	Length of previously existing boundaries not repaired	Total length of artificially marked boundaries at the close of the year	Length of boundaries not demarcated at the close of the year	Length of natural boundaries not requiring artificial marks	Total length of boundaries at the close of the year	Expenditure on demarcation during the year	
								On new work	On repairs
1	2	3	4	5	6	7	8	9	10
	Miles	Miles	Miles	Miles	Miles	Miles	Miles.	Rs	Rs
Cachar	.....	68	2	70	.....	152	222	.....	468
Goalpara	.....	112	...	112	9	301	422	.....	157*
Kamrup	10	380		380	.....	64	454	57	524
Darrang ..	7	33		40	.....	110	150	52	106
Nowgong	.....	124		124	.....	20	144	.....	466
Sibsagar	.....	122	18	140	.....	459	599	.....	447
Lakhimpur	.....	69	46	115	.....	141	256	.....	357
Khasi and Jaintia Hills	.....	28		28	.....	53	81	.....	18
Garo Hills	.....	172	...	172	.....	...	172	.....	669†
Total	17	1,108	66	1,191	9	1,300	2,500	109	3,212

* The total cost under A—VIII(*a*) in the Goalpara division is Rs 675, and the difference of Rs 508 is explained by the fact that this amount was spent on clearing block lines and rides in this division, a description of work excluded from Form No. 48, but the cost of which is charged to A—VIII(*a*)

† Rupees. 20 spent under this head have been wrongly classified by the Comptroller and Auditor General under A—VIII(*f*).

FORM No. 49.

FOREST DEPARTMENT, ASSAM.—STATEMENT OF FOREST AREAS SURVEYED AND UNDER SURVEY DURING THE YEAR 1893-94.

Division.	Areas surveyed and under survey during the year.																											Areas remaining to be taken under survey.	Total forest area at end of the year as per Form No. 46.	Cost.		
	Special surveys—Maps on 4" scale or over, by Survey of India Department or Forest Survey Branch.								Ordinary, included in District Surveys.								Chain and Compass or other Surveys by Local Officers.															
	With interior Details.					Boundary surveys.			With interior details.					Boundary surveys.			With interior details.					Boundary surveys.									
	With details of growing stock.		Without details of growing stock.						With details of growing stock.		Without details of growing stock.						4-inch or over.		Under 4-inch.													
	Previous.	Of the year.	Previous.	Of the year.	Total cost.	Previous.	Of the year.	Total cost.	Previous.	Of the year.	Previous.	Of the year.	Total cost.	Previous.	Of the year.	Total cost.	Previous.	Of the year.	Previous.	Of the year.	Total cost.	Previous.	Of the year.	Total cost.					Previous.	Of the year.	Entire cost of all surveys to end of the year.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Rs.	Sq. m.	Sq. m.	Rs.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Rs.	Sq. m.	Sq. m.	Rs.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Rs.	Sq. m.	Sq. m.	Rs.	Sq. m.	Sq. m.	Rs.	Rs.	Rs.
Cachar	....	....	....	....	....	..	..	..	....	....	....	....	..	..	..	..	..	..	..	..	..	177	....	1,159	575	752	1,159	....	1,159
Sylhet	....	....	....	....	....	..	..	..	....	....	....	....	..	..	..	..	..	..	..	..	..	....	....	....	170	170	....	....	....
Goalpara	613	....	613	....	75,829	..	..	..	....	....	....	....	..	..	..	..	..	..	..	..	..	....	....	1,527	105	718	73,018	4,338	77,356
Kamrup	....	....	....	....	....	..	..	..	....	....	....	....	..	..	..	..	..	..	..	..	..	122	....	4,723	17	139	4,753	....	4,753
Darrang	....	....	....	....	....	..	..	..	....	....	....	....	..	..	..	..	..	..	..	..	..	105	....	64	193	298	64	....	64
Nowgong	....	....	....	....	....	..	..	..	....	....	....	....	..	..	..	..	..	..	..	..	..	20	....	926	124	144	926	....	926
Sibsagar	....	....	....	....	....	..	..	..	....	....	....	....	..	..	..	..	..	..	..	..	..	162	....	171	656	848	171	....	171
Lakhimpur	....	....	....	....	....	..	..	..	....	....	....	....	..	..	..	..	..	..	..	..	..	107	....	339	322	429	339	....	339
Khasi and Jaintia Hills	....	....	....	....	....	..	..	..	....	....	....	....	..	..	..	..	..	..	..	..	..	....	....	....	52	52	....	....	....
Garo Hills	....	....	....	....	....	..	..	..	....	....	....	....	..	..	..	..	..	..	..	..	..	123	....	3,973	10	133	3,973	....	3,973
Total	613	....	613	....	75,829	..	..	..	....	....	....	....	.	..	..	..	..	..	..	..	..	816	....	12,912	2,254	3,683	84,403	4,338	88,741

FORM No. 50.

FOREST DEPARTMENT, ASSAM.—PROGRESS MADE IN WORKING PLANS, 1893-94.

Division	Areas for which Working Plans have been completed		Areas for which Working Plans are being compiled		Areas for which Working Plans have still to be taken in hand	Total Forest area as in Form No 46.	Entire cost per square mile of Working Plans completed.
	At commencement of the year.	During the year	At commencement of the year	Taken in hand during the year			
1	2	3	4	5	6	7	8
	Sq miles	Sq miles	Sq miles.	Sq miles	Sq miles	Sq miles	Rs
		RESERVED FORESTS.					
Cachar ...	.....	.....	.....	.....	752	752	.....
Sylhet ..	.....	.....	.....	.....	170	170	.....
Goalpara	.....	523	.....	.....	195	718	46
Kamrup	.....	.....	.....	.....	139	139	.....
Darrang	.....	.....	.....	.....	298	298	.....
Nowgong	.....	.....	.....	.....	144	144	.....
Sibsagar	.....	.....	.....	.....	848	848	.....
Lakhimpur	.....	.....	.....	.....	429	429	.....
Khasi and Jaintia Hills	.....	.....	.....	.....	52	52	.....
Garo Hills	11	.....	.....	.....	122	133	.....
Total	11	523	.....	.....	3,149	3,683	46.

FORM No. 51.

FOREST DEPARTMENT, ASSAM.—COMMUNICATIONS AND BUILDINGS DURING 1893-94.

Division.	New work undertaken during the year.						Repairs executed during the year.					
	Buildings.		Roads and paths.			Total expenditure on new work.	Buildings.		Roads and paths.			Total expenditure on repairs.
	Description of building.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred.		Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	
1	2	3	4	5	6	7	8	9	10	11	12	13
		Rs.		Miles.	Rs.	Rs.		Rs.		Miles.	Rs.	Rs.
Cachar ...	Erecting two guard's huts at Sadarghat.	60	.....	.....	.....	.....	Repairs to forest bungalow and out-houses at Silchar.	259	Repairs to Katakhal road.	25	200	.....
	Erecting one hut for the office peon at Siluah.	20	.....	.....	.....	.....	Repairs to forest office bungalow at Silchar.	23	Repairs to upper Jiri road.	5	40	.....
	Erecting two out-houses attached to inspection hut at Laharband.	60	.....	.....	.....	.....	Repairs to revenue station building at Sonaimukh.	113	Clearing jungle and throwing up earthwork and repairing two bridges on the road from Matijuri revenue station to public road.	.....	12	.....
	Erecting guard's hut at Jhalnacherra.	20	.....	.....	.....	.....	Repairs to revenue station buildings at Matijuri.	94	Clearing jungle and throwing up earthwork on the road in forest building compound at Silchar.	.....	16	.....

FORM No. 51—*continued.*

Division	New work undertaken during the year						Repairs executed during the year					
	Buildings		Roads and paths.			Total expenditure on new work.	Buildings		Roads and paths			Total expenditure on repairs.
	Description of building.	Expenditure incurred	Road or path and object of the same	Length of road or path.	Expenditure incurred		Nature of repairs.	Expenditure incurred	Nature of repairs	Length repaired	Expenditure incurred	
1	2	3	4	5	6	7	8	9	10	11	12	13
		Rs.		Miles.	Rs.	Rs		Rs.		Miles	Rs	Rs.
Cachar ...	Reconstructing elephant shed.	40	.....	.....	.....	....	Repairs to inspection hut at Laharband	102	.....	.....	.....	.....
	Erecting guard's hut at Moniarkhal	25	.....	.....	.....	.....	Repairs to revenue station buildings at Syaltek.	56	.....	.....	.....	.....
	Erecting guard's hut at Lakhipur.	30	.....	.....	.....	.....			.....	.....		
	Total ...	255		.....	.....	255		647	.....	30	268	915
Sylhet ...	Constructing a cook-shed at Jagadispur.	44	.....	.....	.....	.....	Re-thatching office at Shazirghat.	30	.....	.....	.....	.....
	Completing office house at Jagadispur.	35	.....	.....	.....	.....	Re-thatching office at Muchikandi.	2	.....		.....	.....
	Guard's shed at Gandaimukh.	14	.....	.....	.....	.....	Re-thatching office at Siluah	38	.....		.....	.....
	Constructing guard's shed at Shakir Mahomed.	24	.....	.....	.....	.....	Re-thatching outhouses at Siluah.	4	.....		.....	.....

Sylhet ...	Constructing guard's shed at Silghat.	11	.....	.....	.....	.....	Re-thatching office at Dinarpur.	15	.....	.....	.....	.....
							Re-thatching out-house at Dinarpur.	5	.....	.....	.....	.....
							Re-thatching office at Putijuri.	50	.....	.....	.....	.....
							Repairing office at Patharkandi.	23	.....	.....	.....	.....
							Repairing office at Durgaband.	5	.....	.....	.....	.....
							Repairing office at Maulvi Bazar.	20	.....	.....	.....	.....
							Re-thatching office at Kanairghat.	69	.....	.....	.....	.....
							Repairing out houses at Kanairghat.	2	.....	.....	.....	.....
	Total ...	128		.....	.....	128		263		.....	.....	263
Goalpara...	Constructing three servants' out-houses at Dhubri.	454	.....	.....	.....	.....	Improvement and repairs to forest bungalow at Dhubri.	132	Improvement of boundary paths and widening of block lines.	39	104	.....
	Constructing ranger's office at Gurubhasa.	125	.....	.....	.....	.....	Improvement to office godown out-houses.	175	.....	.....	.....	.....
	Constructing quarters and out-office at Gurubhasa..	135	.....	.....	.....	.....	Improvement to inspection bungalow at Barabada.	167	.....	.....	.....	.....
	Constructing guard's houses at Gurubhasa.	48	.....	.....	.....	.....	Improvement to Guma range office godown out-houses.	45	.....	.....	.....	.....
	Constructing inspection hut and out-offices at Dangsibari.	115	.....	.....	.....	.....	Repairs and dismantling of old building at Gurubhasa.	102	.....	.....	.....	.....

FORM No 51—*continued.*

Division	New work undertaken during the year.						Repairs executed during the year.					
	Buildings.		Roads and paths			Total expenditure on new work	Buildings.		Roads and paths			Total expenditure on repairs.
	Description of building.	Expenditure incurred.	Road or path and object of the same.	Length of road or path	Expenditure incurred		Nature of repairs.	Expenditure incurred	Nature of repairs.	Length repaired.	Expenditure incurred	
1	2	3	4	5	6	7	8	9	10	11	12	13
		Rs		Miles	Rs	Rs		Rs.		Miles	Rs	Rs
Goalpara ...	Constructing inspection bungalow, forester's house and out-offices at the Sankas.	98	.....	...	.....		Repairs to buildings at Kachugaon.	11	.....	...	.....	.....
	Constructing Forester's house and out-offices at Patgaon.	60			.....	...	.....	.....	...	...	.....	.....
	Constructing guard's and mahuts' houses at Kachugaon.	21	.....	.....	.....	.....	.....	...	...	.....	.....	.....
	Constructing Forester's houses and out-offices at Bilasipara	258	.....		.....	.....	.....		...	...	.....	.....
	Total. ...	1,324		.....	.....	1,324		632		39	104	736

Kamrup ..	Constructing two new out-houses at Gauhati.	62	.....	.....	.....	....	Annual repairs to Gauhati Forest bungalow.	1,517	Repairing and bridge-work to Bakulipara road.	3	92	...
	Rebuilding range office.	140	.....	.....	.....	...	Repairing out-houses attached to Gauhati Forest bungalow.	213	Repairing and bridge-work to Kulsi-Ukiam road.	12	367	...
	Constructing Ukiam bungalow for divisional officer.	90	.....	.....	.....	..	Repairing Rani range office.	57	Repairing and bridge-work to Hathigarh road.	2	61	...
	Constructing one out-house at Kulsi.	10	.....	.....	.....	...	Repairing two out-houses of range office.	28	Rapairing and bridge-work to Hathigarh-Barbokra road.	...	92	...
	Constructing a guards' hut at Darranga.	7	.....	.....	.....	.....	Repairing Kulsi range office.	8	Repairing and bridge-work to Ghograchuk-Rajapara road.	.....	417	..
	Constructing temporary huts for range office at Boko.	4	.....	.....	.....	...	Repairing out-houses.	130	Repairing and bridge-work to Rajapara-Katrabari road.	.....	245	...
							Repairing Kulsi divisional officer's bungalow.	82	Repairs to Kulsi, Barduar, Pantan, and Milmilia inspection paths.	36	234	...
							Repairing Kukurmara depôt.	2	Repairs to Jarasal-Kawasing inspection paths	7	75	...
									Metalling Gauhati Forest bungalow road.	...	38	..
	Total ..	313		.....	.....	313		2,037		60	1,621	3,658

FORM No. 51—*continued.*

Division	New work undertaken during the year.						Repairs executed during the year.					
	Buildings		Roads and paths.			Total expenditure on new work	Buildings.		Roads and paths.			Total expenditure on repairs.
	Description of building	Expenditure incurred	Road or path and object of the same.	Length of road or path.	Expenditure incurred		Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	
1	2	3	4	5	6	7	8	9	10	11	12	13
		Rs		Miles	Rs	Rs.		Rs.		Miles.	Rs.	Rs.
Darrang ...	Adding two new rooms to the Forest bungalow at Bhairabighat.	1,000	..	... ..	.. ...	.....	Repairs to Dekrigaon range office building with out-houses.	31	Clearing jungle and throwing up earth-work and repairing the bridge of the Patasali road.	8	767	...
	A partly corrugated-roofed cookshed at Bhairabighat.	159	... .	... ..	...		Re-thatching the Forest bungalow at Bhairabighat.	384	Clearing jungle of the Dyumukh road.	17	173	... .
	Rebuilding servants' house attached to Forest bungalow at Bhairabighat.	200		.....	.....	.....	Repairs to range office building and out-houses at Behali.	40	Repairs to the south Plantation road.	7	320	...
	Rebuilding a stable in the Bhairabighat bungalow compound.	224	.....	.	...	. ...	Repairs to range office building and out-houses at Bengbari.	7	Clearing jungle of the Rangajan road from Sâl forest to Rangajan.	3	26	...
	Temporary huts at Patasali for the inspection of the Inspector-General of Forests.	100		.....	. ...	...	Repairs to Nonai inspection huts.	6	.....	...	...	...
	Total ...	1,683		...	.....	1,683		468		35	1,286	1,754

Nowgong ...	Clerk-shed attached to divisional office at Nowgong.	170	.....	..	.....	.....	Re-thatching divisional office at Nowgong.	217	.....	...	..	...
	Range officer's quarters at Nowgong.	50	.....	.....	.....	.....	Petty repairs to out-houses at Nowgong.	18	.....	...	...	...
							Petty repairs to western range building.	73	.....	...	...	...
							Petty repairs to eastern range buildings	69	.....	...	...	...
	Total ...	220		...	.....	220		377		.....	.....	377
Sibsagar ...	Temporary sheds at Sikarighat (Nigriting) for rubber checking staff.	17	...	..		.....	Repairs to Golaghat buildings.	272	Repairs to Mikir Hills road.	35	120	...
	Temporary sheds at Dikomukh for rubber checking staff.	10	.....	.....	.....	.....	Repairs to Ohguri buildings.	20	Repairs to Jamaguri-Barapathor road	10	78	...
							Repairs to Daygurung buildings.	41	Repairs to Ohguri-Daygurung road	4	45	...
							Repairs to Jamaguri buildings.	39	Repairs to Ohguri-Jamaguri road.	9	50	...
							Renewing Kalioni forest guards' hut.	28	Repairs to Daygurung-Kalioni road.	6	50	
							Repairs to Sibsagar buildings.	342	Repairs to Ohguri-Nagora road.	6	32	..
							Repairs to Jorhat buildings.	36	Repairs to Nagora-Borhala road.	6	31	...

FORM No. 51—*continued.*

Division.	New work undertaken during the year.						Repairs executed during the year.					
	Buildings.		Roads and paths.			Total expenditure on new work.	Buildings.		Roads and paths.			Total expenditur on repairs.
	Description of building.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred.		Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	
1	2	3	4	5	6	7	8	9	10	11	12	13
		Rs.		Miles.	Rs.	Rs.		Rs.		Miles.	Rs.	Rs.
Sibsagar ...	.....	...	.....	...	...	.....	Repairs to Moriani buildings.	5	Repairs to Ghuladhari boundary road.	4	8	...
									Repairs to Daygurung-Kaolam a t i road.	2	6	...
									Repairs to Haripatra Ali road.	1	10	...
									Repairs to Abhaypur bridle path.	1	10	...
									Repairs to Malimora path.	4	10	...
									Repairs to Halungapar reserve inspection path.	4	23	...
									Repairs to Desai reserve inspection path.	2	10	...
									Repairs to bamboo bridge in front of Jorhat range office.	...	2	...
	Total ...	27		...	...	27		783		94	485	1,268

										M.	ch.			
Lakhimpur	Forest guard's huts at Digboi.	45	.....	...	...	...	Re-thatching, re-plastering, and re-walling, &c., of the Dibrugarh Divisional Officer's bungalow and out-houses.	431	Clearing, putting earth, and dressing the road from Margherita station to inspection bungalow.	0	5	38	...
	Temporary huts for rubber check station at Dibrugarh steamer-ghat.	13	.....	...	...	...	Re-thatching, white-washing, &c., of Dibrugarh range office and out-houses.	113	Clearing and putting earth on the bridle path between 6th and 7th mile-posts of Makum forests.	2	0	10	...
	Ditto ditto at Dhansirimukh steamer-ghat.	15	.....	...	...	...	Re-thatching, re-walling, &c., of revenue and check station house of the Dibrugarh range.	80	Ditto ditto, path from Namsang to Jaipur.	3	0	12	...
							Re-thatching, re-plastering, renewing rafters, and white-washing, &c., of Margherita inspection bungalow.	283	Clearing, putting earth, and dressing the Makum-Dum Duma road.	4	0	30	...
							Re-thatching and plastering, &c., of Margherita range officer's quarters.	65	Ditto ditto path from Makumgao to Borbil.	3	0	10	...
							Re-thatching and re-walling, &c., of forest guard's shed at Jaipur, Digboi, and 7th mile.	45	Ditto ditto path from Media tea garden to Rajgarh road.	1	60	7	...
									Ditto ditto path within the Kaddam reserve.	3	0	12	...
									Ditto ditto path within the Bhorolua reserve.	1	40	8	...

FORM No 51—*continued.*

Division.	New work undertaken during the year.						Repairs executed during the year.					
	Buildings.		Roads and paths.			Total expenditure on new work.	Buildings.		Roads and paths.			Total expenditure on repairs.
	Description of building.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred.		Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	
1	2	3	4	5	6	7	8	9	10	11	12	13
		Rs.			Rs.	Rs.		Rs.		M. ch.	Rs.	Rs.
Lakhimpur ...	.....	...	.....	...	...	.....	Re-thatcing, renewing of posts, walling, and white-washing of Dum Duma range officer's quarters.	96	.....	...	...	...
							Re-thatching and re-walling the Sadiya guard's hut	12	.....	...	...	...
							Re-thatching, re-walling, and white-washing, &c., of the North Lakhimpur range office building and out-houses.	63	.....	...	...	...
	Total ...	73		...	...	73	.....	1,188		18 25	127	1,315

										Miles.		
Khasi and Jaintia Hills	.....	...	.....	...	...	...	Re-thatching of Riat Khwan forest hut.	22	.....	...	...	...
	Total ...	...	.....	...	...	...	...	22	...		...	22
Garo Hills	A corrugated-iron-roofed servant's hut at Damra.	76	A deviation at Chima of the Dambu--Damra road to avoid its zigzag portion.	2	625	...	Repairs to Tura bungalow and godown.	118	Repairs to Dambu-Damra road.	24	358	...
	A corrugated-iron-roofed cookshed at Damra.	63	.....	...	...	...	Repairs to clerk's huts and other houses at Tura.	89	Repairs to Tura bungalow-road		32	...
	A corrugated-iron-roofed range office building at Bagmara, partly constructed.	282	.....	...	...		Repairs to range officer's quarters and out-houses at Fulbari.	130	Repairs to Damra bungalow road.	...	3	...
	One latrine at Bagmara.	1	.....	...	...	...	Repairs to beat office and other out-huts at Mahendraganj.	10	.....	...	...	...
	One house at Mornoi depôt.	80	.....	...	...	...	Repairs to inspection huts at Dibru Hill.	5	.....	...	...	...
	One temporary hut at Sangsak.	33	.....	...	...	...	Repairs to out-huts of the range office at Bagmara.	7	.....	...	...	...
	Inspection huts at Molakhoa.	35	.....	...	...	...	.....		.....	...	...	...
	One cookshed at Fulbari.	7	.....	...	...	...	.....		.....	...	...	...

FORM No. 51—*concluded.*

Division.	New work undertaken during the year.						Repairs executed during the year.					
	Buildings.		Roads and paths.			Total expenditure on new work.	Buildings.		Roads and paths.			Total expenditure on repairs.
	Description of building.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred.		Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	
1	2	3	4	5	6	7	8	9	10	11	12	13
		Rs.		Miles.	Rs.	Rs.		Rs.		Miles.	Rs.	Rs.
Garo Hills...	Clerks' huts at Tura.	71	...		...	...	Repairs to outhouses at Mornoi depôt.	12	.....		...	...
	Inspection hut at Parakasa.	10	.....	...	..	.....	Repairs to bungalow, range office, range officer's, forester's, and forest guard's houses at Damra.	198	.....		.	...
	Forester's quarters at Mahendraganj.	20	...	...		.....	Repairs to inspection houses at Dambu.	21	....		...	..
	Beat office at Mahendraganj.	11	.....	..	...	.....	.....	...	.....	...	...	...
	Total ...	689		2	625	1,314		590		24	393	983
	Grand total ...	4,712		2	625	5,337		7,007		300	4,284	11,291

FORM No. 52.

FOREST DEPARTMENT, ASSAM—REGISTER OF BREACHES OF FOREST RULES DURING 1893-94.

Forest Division	Cases pending from 1892-93.	New cases of the year. Injury to forest by fire.	Unauthorised felling or appropriation of wood and minor forest produce.	Grazing without permission, or in tracts in which grazing is prohibited.	Other offences	Total new cases of the year.	Total Cases.	Disposed of during the year. Convictions. Cases.	Convictions. Persons.	Acquittals. Cases.	Acquittals. Persons	Total Cases.	Total Persons.	Cases pending at close of year.
A.—CASES TAKEN INTO COURT.														
Cachar Division—Cachar district	2	....	....	...	4	4	6	4	11	2	2	6	13	....
Sylhet Division—Sylhet district	....	....	46	....	10	56	56	42	82	10	25	52	107	4
Goalpara Division—Goalpara district	1	2	....	....	...	2	3	1	2	2	18	3	20	....
Kamrup Division—Kamup district	....	....	..	....	....	....	....	....	....	....	....	...	...	....
Darrang Division—Darrang district	....	....	8	....	....	8	8	8	8	....	....	8	8	....
Nowgong Division—Nowgong district	....	2	1	....	1	4	4	2	14	2	2	4	16	....
Sibsagar Division—Sibsagar district	3	....	16	2	1	19	22	13	36	6	13	19	49	3
Lakhimpur Division—Lakhimpur district	....	....	....	...	..	....	....	....	....	....	....	....	.	....
Garo Hills Division—Garo Hills district	....	1	7	....	1	9	9	6	43	1	19	7	62	2
Khasi and Jaintia Hills Division—Khasi and Jaintia Hills district	....	1	1	....	....	2	2	....	....	2	2	2	2	....
Total	6	6	79	2	17	104	110	76	196	25	81	101	277	9
B.—CASES DISPOSED OF UNDER SECTION 62 OF THE ASSAM FOREST REGULATION.														
Cachar Division—Cachar district	....	....	5	....	38	43	43	43	43	....	....	43	43	....
Sylhet Division—Sylhet district	....	....	170	...	1	171	171	171	212	....	....	171	212	....
Goalpara Division—Goalpara district	....	....	1	....	4	5	5	5	25	....	....	5	25	....
Kamrup Division—Kamrup district	3	1	13	....	1	15	18	16	16	1	1	17	17	1
Darrang Division—Darrang district	....	1	12	....	....	13	13	13	13	....	....	13	13	....
Nowgong Division—Nowgong district	...	....	17	....	..	17	17	17	17	...	....	17	17	....
Sibsagar Division—Sibsagar district	....	....	161	3	2	166	166	166	201	....	....	166	201	....
Lakhimpur Division—Lakhimpur district	....	....	84	....	2	86	86	86	104	....	....	86	104	....
Garo Hills Division—Garo Hills district	....	....	114	....	11	125	125	125	131	....	....	125	131	....
Total	3	2	577	3	59	641	644	642	762	1	1	643	763	1
C.—UNDETECTED CASES.														
Goalpara Division—Goalpara district	....	1	....	....	....	1	1	....	....	....	....	....	....	....
Garo Hills Division—Garo Hills district	....	6	...	....	....	6	6	....	....	....	...	....	....	....
Total	....	7	....	....	....	7	7	....	....	....	....	....	....	....
Grand total A	6	6	79	2	17	104	110	76	196	25	81	101	277	9
Grand total B	3	2	577	3	59	641	644	642	762	1	1	643	763	1
Grand total C	....	7	....	...	....	7	7	....	....	....	....	....	....	....

FORM No. 53.

FOREST DEPARTMENT, ASSAM.—AREA OF FOREST TRACTS PROTECTED FROM FIRE DURING THE DRY SEASON 1893-94.

Division	Forest tracts	Year in which protection commenced	Area protected during 1892-93.	Area attempted to be protected.	Failures	Area actually protected	Cost.
	GOALPARA DISTRICT.		Acres.	Acres.	Acres.	Acres.	Rs.
Goalpara ..	Bijni Reserve	1888-89	90,980	99,980	22,456	77,524	121
	Bhumeswar Hill ...	1886-87	4,033	4,180	...	4,180	104
	Bengtol—						
	Bengtol Block ...	"	7,154	8,682	...	...	...
	Bhur	1889-90	2,575	5,653	...	14,335	391
	Chirang Reserve—						
	Saralbhanga Circle ...	"	69,205	112,358	...	...	...
	Sidli Circle	1876-77	43,760	35,903	...	148,261	1,054
	Ripu Reserve—						
	Muktaigaon Block ...	1887-88	3,200	3,738	...	...	...
	Maula and Janali ...	1889-90	28,800	28,971	13,444	...	...
	Ranga and Ripu ...	"	36,223	16,435	...		...
	Pekua	"	10,190	10,190	...	...	...
	Pechadaveri	1875-76	3,210	4,828	...	...	...
	Addition	1889-90	1,232	1,232	...	...	...
	Ditto	1892-93	142	142	...	...	...
	Gangia Block ...	1889-90	3,965	2,900	...	...	...
	" Addition ...	1892-93	3,315	3,315	...	..	...
	Charaidaka Block ...	1889-90	3,310	3,754	...	...	...
	" Addition ...	1892-93	582	582	...		...
	Atiabari Block ...	1889-90	7,260	9,377	...	...	...
	" Addition ...	1892-93	4,013	4,013	..	...	...
	Polo Hel, Suigimajli, and Bambajhar Blocks ...	1889-90	78,858	61,112	...	137,145	2,032
	Guma Reserve ...	1876-77	15,776	16,429	7	...	...
	" Addition ...	1892-93	608	608	...	17,030	688
	Total	...	427,391	434,382	35,907	398,475	4,390
	KAMRUP DISTRICT						
Kamrup ...	Barduar ...	1873-74	15,896	16,143	...	16,143	158
	Pantar	"	22,910	21,910	...	21,910	179
	Kulsi	"	3,988	3,988	...	3,988	211
	Milmilia	1874-75	4,330	4,514	...	4,514	60
	Mayang Hill	1882-83	4,800	4,800	...	4,800	75
	Chhaygaon	1886-87	2,705	2,705	...	2,705	121
	Mataikhar	1873-74	2,240	2,240		2,240	169
	Jara	"	820	1,037	...	1,037	42
	Rani { Mayang Block ... / Mairakanda " ... }	1882-83	10,400	11,035	...	11,035	238
	Kawasing	"	3,260	3,570	...	3,570	112
	Simla Hills	"	300	317	...	317	20
	Dumpara	"	450	497	...	497	20
	Khaksi Sikrabura Hill ...	"	2 500	2,530	..	2,530	30
	Ghoraputa	"	100	120	...	120	20
	Khatkhati Hill ...	"	640	644	...	644	31
	Taraibari	"	700	806	...	806	31
	Garubaldha	"	200	240	...	240	10
	Khurkhuri	"	140	149		149	13
	Sursuria Hills... ...	"	900	970	...	970	2
	Gizang	"	930	4,770	...	4,770	4
	Jaipur	"	774	824	...	824	20
	Baradobha	1889-90	1,000	1,190	...	1,190	2
	Nampathar	"	400	640	...	640	1
	Barjuli	"	1,000	1,120	...	1,120	10
	Hajo	"	240	243	30	213	38
	Jharikhuri*	"	1,045	1,978	200	1,778	40
	Mugakhal	"	170	284	...	284	30
	Darranga	1890-91	8,000†		...	...	...
	Bogai, Bongaon, Boko, and Luki unclassed forests ...	"	2,000†		...	...	...
	Total	...	91,838	89,264	230	89,034	1,687

* Jharikhuri and Bursgohain were gazetted under one name, *viz.*, Jharikhuri (see Notification No 1192R, dated the 19th March 1894)

† These areas were not protected from fire during 1893-94

FORM No 53—*continued.*

Division	Forest tracts	Year in which protection commenced	Area protected during 1892 93	Area attempted to be protected	Failures.	Area actually protected.	Cost.
			Acres	Acres	Acres.	Acres.	Rs.
	DARRANG DISTRICT.						
Darrang ...	Khalingduar ...	1883-84	12,892	27,052	946	26,106	162
	Balipara Reserve ..	1873-74	4,570	4,570	...	4,570	295
	Charduar	1878-79	892	892	...	892	
	Garumari	1874-75	180	180	...	180	56
	Bamuni Hills plantation ...	1878-79	8	8	...	8	...
	Total	...	18,542	32,702	946	31,756	513
	NOWGONG DISTRICT						
Nowgong	Kholahat ...	1873-74	16,848	16,848	.	16,848	239
	Rongkhong	1889-90	6,000	6,339	4	6,335	84
	Sonaikusi ..	1888-89	10,000	10,754	1	10,753	153
	Doboka ...	1873-74	28,633	29,014	.	29,014	530
	Diju	1879-80	5,735	5,742	100	5,642	132
	Suang	1885-86	1,924	6,612	...	6,612	78
	Bamuni	"	449	449	...	449	60
	Jangthung	1889-90	8,000	8,047	...	8,047	112
	Sildharampur ...	"	3,457	4,191	...	4,191	198
	Kukrakata Hill ...	"	3,700	3,936	...	3,936	23
	Total ...	...	84,746	91,932	105	91,827	1,609
	KHASI AND JAINTIA HILLS DISTRICT.						
Khasi and Jaintia Hills	Riat Khyan	1881-82	962	967	...	967	409
	Shillong unclassed forests	1874-75	3,618	3,618	3	3,615	556
	Total ...	...	4,580	4,585	3	4,582	965
	GARO HILLS DISTRICT						
Garo Hills ...	Jinari	1889-90	6,640	6,640	17	6,623	105
	Chima and Bangshi	"	8,640	8,680	...	8,680	256
	Dhima ...	"	5,750	5,760	30	5,730	180
	Dilma ...	"	1,119	1,120	...	1,120	63
	Raja Simla	"	4,800	4,800	21	4,779	117
	Ildek	"	1,280	1,280	7	1,273	57
	Darugiri	1887-88	2,448	2,448	...	2,448	101
	Rongrengiri	1889-90	8,844	8,860	25	8,835	220
	Dambu	1887-88	4,364	4,364	13	4,351	185
	Songsac	1889-90	8,005	8,005	...	8,005	222
	Emangiri ...	"	2,080	2,080	1	2,079	41
	Rewak	"	1,280	1,280	...	1,280	27
	Siju	"	1,280	1,280	200	1,080	1
	Bagmara	"	12,320	12,320	14	12,306	45
	Angratoli	"	9,138	9,138	100	9,038	48
	Dibru Hill	"	6,065	6,080	232	5,848	93
	Bolsalgiri	"	640	640	35	605	25
	Tura ...	"	480	480	130	350	41
	Total	...	85,173	85,255	825	84,430	1,827
	Grand total ...	...	712,270	738,120	38,016	700,104	10,991†

* Annual Form No. 61 shows Rs. 1,848 The difference of Rs 21 expended on demarcation work was wrongly classified by the Comptroller General under "A—VIII (*f*)."

† Minus difference of Rs 14 between the totals of expenditure under A—VIII (*f*) in this form and Form No 61 is the result of wrong classification as explained under * above, and Rs 3 in the Sibsagar Division It was too late to make the needful adjustment in the annual summary of expenditure

FORM No. 54.

FOREST DEPARTMENT, ASSAM.—AREA CLOSED AND OPEN TO GRAZING DURING 1893-94.

Division.	Area, in square miles,					
	Closed to all animals		Closed to browsers (camels, goats, or sheep).		Open to all animals.	Total area
	Whole year.	Part of year.	Whole year.	Part of year.	Whole year.	
1	2	3	4	5	6	7
Reserved Forests.						
Cachar ...	752	...	...	...	...	752
Sylhet	170	...	...	...	...	170
Goalpara	686	..	718	..	32	718
Kamrup	139	...	139	...	...	139
Darrang	298	...	...	...	...	298
Nowgong	144	...	...	...	...	144
Sibsagar	...	...	...	...	848	848
Lakhimpur	407	...	...	...	22	429
Khasi and Jaintia Hills ...	52	...	...	...	...	52
Garo Hills	131	...	133	...	2	133
Total	2,779	...	990	...	904	3,683
Unclassed State Forests.						
Cachar	...	...		...	740	740
Sylhet	...	...	...	...	239	239
Goalpara	...	...	...	...	754	754
Kamrup	...	...	...	...	490	490
Darrang	...	...	...	...	187	187
Nowgong	...	...	...	...	213	213
Sibsagar	...	...	...	...	599	599
Lakhimpur	...	...	...	...	3,480	3,480
Khasi and Jaintia Hills ...	4	...	...	...	96	100
Garo Hills	...	...	...	...	217	217
Total	4	...	...	...	7,015	7,019
Grand total	2,783	...	990	...	7,919	10,703

FORM No. 55.

FOREST DEPARTMENT, ASSAM.—RETURN OF GRAZING IN THE STATE FORESTS DURING 1893-94.

Division.	Grazing on Payment, number of Animals												
	At full rates.						At privileged rates.					Fees received.	
	Buffaloes.	Cows and bullocks.	Goats and sheep.	Camels	Other animals	Fees received	Buffaloes	Cows and bullocks.	Goats and sheep.	Camels.	Other animals.	Actual	Value at full rates
1	2	3	4	5	6	7	8	9	10	11	12	13	14
						Rs.						Rs.	Rs.
Reserved Forests.													
Goalpara	... ..	.	.	..	.	.		.. ...		.	...		.....
Sibsagar	423	101	..	.	.	237	.			.. ...			.
Lakhimpur	...		. ...	.	20	20	...		.	.			
Garo Hills	...	.	.			.	..			..		...	
Total Reserved Forests	423	101	.	.	20	257	..			.. ...		...	... .
Unclassed State Forests.													
Sylhet	.....	...	...	..	3	12			. . .	..		.....	. ..
Goalpara	459	...	....			229	47		.. .	...		12	12
Kamrup	1,389	13	2			698					..		.....
Darrang	1,669		..		....	832		...	...	.....	.....	.... .	... .
Nowgong	2,230	..	.			1,116				..		...	.
Sibsagar	2,561	89	.			1,303	.	.		...	.		...
Lakhimpur	2,871	1,191			.	1,733				..		...	... ..
Khasi and Jaintia Hills	.....		.. .						...			...	
Garo Hills	1,736	895	.			1,092			..		...	...	
Total Unclassed State Forests	12,915	2,188	2		3	7,015	47		.		.... .	12	12
Grand total	13,338	2,289	2		23	7,272*	47	...				12	12

* The minus difference of Rs. 6 between the total of grazing dues in this from and Form No. 61 is due to its exclusion from this form, as it represents revenue from fodder grass.

FORM No. 55—*continued.*

Division.	Grazing Free, number of Animals. By right under Settlement. Buffaloes.	Cows and bullocks.	Goats and sheep.	Camels.	Other animals.	Value of fees at full rates.	During pleasure of Government, or otherwise than under Settlement. Buffaloes.	Cows and bullocks.	Goats and sheep.	Camels.	Other animals.	Value of fees at full rates.	Total value of fees at full rates.	Grand total of value at full rates.
	15	16	17	18	19	20	21	22	23	24	25	26	27	28
						Rs.						Rs.	Rs.	Rs.
Reserved Forests.														
Goalpara	...	.		...	.	.	110	.	...	.	...	55	55	55
Sibsagar	...		...	.	.	...	...	...	...	..	.	..	.	237
Lakhimpur	..				.	...			...	...		..	..	20
Garo Hills	...	.	...				..	20	...	...	..	5	5	5
Total Reserved Forests	.		.			..	110	20	...	.		60	60	317
Unclassed State Forests.														
Sylhet	...	...	...	...	...	...	...	...	..	...	...	.....	...	12
Goalpara	...	...	...	...		...	...	...	.	...	...	. ...	. ....	241
Kamrup	...	.	...	...	.	..	...	..	.	...	...	.....	.....	698
Darrang	...	...	...	..	..	..	...	...	...	...	..	... .	.....	832
Nowgong	..	...			..	...	..	..		...	...	.....	. ....	1,116
Sibsagar	...	.		..	..	...	..	...	...	...	..	.....	....	1,303
Lakhimpur	...	...	...	...	..	...	..	...		...		.. ..	.... .	1,733
Khasi and Jaintia Hills	...				..	...	.	57		...		14	14	14
Garo Hills	...	...			.	...	...	.		.		. ...	..	1,092
Total Unclassed State Forests	..		.	..	...	..	..	57		..	...	14	14	7,041
Grand total	...	...	...	...	..		110	77	...	...		74	74	7,358

FORM No. 56.

FOREST DEPARTMENT, ASSAM.—AREA OF PLANTATIONS, 1893-94.

Division	Name of Plantation.	Area, in Acres: On 1st July 1893	Added during the year.	Excluded during the year	Area on 30th June 1894	Receipts of the year	Charges of the year
Regular Plantation.	*Kusi Plantation.*					Rs	Rs.
Kamrup	Caoutchouc	160	.....	.....	160	.....	119
	Teak	171	.....	.....	171	2	114
	Sisu	20	.....	.....	20	.....	26
	Khoir	12	.....	.....	12	.....	39
	Bamboo	2	.....	.....	2	36	1
	Miscellaneous...	2	.....	.....	2	.....	93
	Total	367	.....	.....	367	38	392
Darrang	*Charduar Plantation.*						
	Caoutchouc	2,063	41	..	2,104	6	7,674
	Bamuni Hill Plantation.						
	Caoutchouc	8	.....	.....	8		...
	Total	2,071	41	.....	2,112	6	7,674
	Total Regular Plantation	2,438	41	.....	2,479	44	8,066
Cultural Operation.							
Cachar	Sowing and planting in reserves ...	.....		.....	.....	.....	70
Sibsagar	Nambor timber plantation ...	168	.....	.....	168	.....	80
Lakhimpur	Makum teak plantation	2	.....	.....	.....	.....	.....
Garo Hills	Sâl nurseries at Dambu	20·50	.....	.....	20·50	.....	8
	Sowing on blanks in Bagmara reserve	.....	.....	.....	.....	..	4
	Total Cultural Operation	190·50	.....	.....	190·50	.....	162
	Grand total	2,628·50	41	.....	2,669·50	44	8,228

FORM No. 57.

FOREST DEPARTMENT, ASSAM.—OUTTURN (IN CUBIC FEET, SOLID) OF TIMBER AND FUEL DURING THE YEAR 1893-94, AND AGENCY OF EXPLOITATION.

Division.	Timber in the rough, Logs.					Timber in the rough, Poles.					Sawn or squared timber.				
	Government.	Purchasers.	Free Grantees.	Right-holders.	Total.	Government.	Purchasers.	Free Grantees.	Right-holders.	Total.	Government.	Purchasers.	Free Grantees.	Right-holders.	Total.
	C. ft.	C. ft.	C. ft		C. ft.	C. ft.	C. ft.	C. ft.		C. ft.	C. ft.	C. ft.			C. ft.
I.—Reserved Forests.															
Cachar	...	412,330	...	...	412,330	...	764		...	764	...	6	...	...	6
Sylhet	...	25,049	...	..	25,049	..	124	.	...	124	...	...	...	...	...
Goalpara	10,626	40,549	...	...	51,175	...	38,712	48,890	..	87,602	..	...	...	...	..
Kamrup	2,825	29,746	..	...	32,571	9	61,228	...	...	61,237	1,630	38,430	...	...	40,060
Darrang	...	12,070	2,594	..	14,664	...	3,194	...	..	3,194	...	...	..	...	...
Nowgong	...	63,950	2,080	...	66,030	...	1,298	...	...	1,298	...	...	...	...	...
Sibsagar		16,450	.		16,450	...	3,984	...	...	3,984	...	23,154	.	...	23,154
Lakhimpur	.	3,800	...	...	3,800	.	.	...		...	...	...	...	...	...
Khasi and Jaintia Hills	...	...	...	..	...	..	...	...		...	...	...	...	...	...
Garo Hills	...	19,800	.		19,800	...	...	...		...	...	...	..	...	...
Total Reserved Forests	13,451	623,744	4,674	...	641,869	9	109,304	48,890		158,203	1,630	61,590	...	..	63,220
II.—Unclassed Forests.															
Cachar	...	323,816	...	...	323,816	.	360	7,912	.	8,272	...	18	...	...	18
Sylhet	...	227,421	...	...	227,421	..	92	...	...	92	...	...	...	...	..
Goalpara	28,347	9,456	16,320	...	54,123	..	332	...	...	332	...	...	...	...	...
Kamrup	...	15,640	...	...	15,640	.	8,918	15,440	...	24,358	...	1,885	...	...	1,885
Darrang ... ... —	...	178,784	119,480		298,264	..	27,641	...	.	27,641	...	60,199	..	..	60,199
Nowgong	..	100,080	3,900	...	103,980	.	2,904	..	...	2,904	...	...	..	...	...
Sibsagar	...	99,600	140,480	.	240,080	..	5,760	...	..	5,760	...	549	..	.	549
Lakhimpur	...	896,593	52,730		949,323	..	4	...	..	4	...	161,644	..	...	161,644
Khasi and Jaintia Hills	...	750	...		750	...	..	...	...	..	...	...	.	.	.
Garo Hills	34	49,250	340	.	49,624		.		.	..	26	..	...	.	26
Total Unclassed Forests	28,381	1,901,390	333,250	..	2,263,021		46,011	23,352	.	69,363	26	224,295	..		224,321
Grand total	41,832	2,525,134	337,924	...	2,904,890	9	155,315	72,242	...	227,566	1,656	285,885	..	...	287,541

FORM No. 57—*continued.*

Division.	Miscellaneous.					Fuel.					Total.
	Government.	Purchasers.	Free Grantees.	Right-holders.	Total.	Government.	Purchasers.	Free Grantees.	Right-holders.	Total.	Outturn.
	C. ft.	C. ft.	C. ft.		C. ft.		C. ft.	C. ft.		C. ft.	C. ft.
I—Reserved Forests.											
Cachar	...	...	...	...	..	...	16,812	...	...	16,812	429,912
Sylhet	...	2,780	...	..	2,780	...	732	...	...	732	28,685
Goalpara	...	...	...	...	...	...	6,256	133,252	...	139,508	278,285
Kamrup	25	53,071	1,770	...	54,866	...	118,480	...	...	118,480	307,214
Darrang	...	1,020	...	...	1,020	...	1,048	..	...	1,048	19,926
Nowgong	...	..	...	...	...	...	30,768	2,816	...	33,584	100,912
Sibsagar	...	5,156	...	...	5,156	...	3,456	..	...	3,456	52,200
Lakhimpur	...	...	...	...	...	...	...	...	...	...	3,800
Khasi and Jaintia Hills	...	..	..	...	...	...	788	...	...	788	788
Garo Hills	...	4,170	...	...	4,170	...	...	...	...	...	23,970
Total Reserved Forests	25	66,197	1,770	...	67,992	...	178,340	136,068	...	314,408	1,245,692
II.—Unclassed Forests.											
Cachar	134,411	7,021	...	..	141,432	...	113,906	66,400	...	180,306	653,844
Sylhet	...	22,980	132,560	...	155,540	...	103,126	1,223,394	...	1,326,520	1,709,573
Goalpara	...	...	...	...	..	...	944	6,600	...	66,944	121,399
Kamrup	871	11,690	...	...	12,561	...	15,344	73,500	...	88,844	143,288
Darrang	...	1,170	...	...	1,170	...	17,248	205,088	...	222,336	609,610
Nowgong	...	1,558	...	...	1,558	...	34,010	15,300	...	49,310	157,752
Sibsagar	3,308	13,404	49,600	...	66,312	...	69,866	267,218	...	337,084	649,785
Lakhimpur	2,804	2,100	...	...	4,904	...	97,024	5,600	..	102,624	1,218,499
Khasi and Jaintia Hills	...	...	..	...	...	...	738	...	...	738	1,488
Garo Hills	4	102,081		...	102,085	...	...	...	...	.	151,735
Total Unclassed Forests	141,398	162,004	182,160	...	485,562	...	452,206	19,22,500	...	2,374,706	5,416,973
Grand total	141,423	228,201	163,930	...	553,554	...	630,546	2,058,568	...	2,689,114	6,662,665

FORM No. 58.

FOREST DEPARTMENT, ASSAM.—OUTTURN OF MINOR FOREST PRODUCE DURING THE YEAR 1893-94.

Division.	Description of produce		Produce removed or utilized									
			By Government agency.		By purchasers		By free grants		By right-holders		Total.	
			Quantity	Value	Quantity	Value	Quantity.	Value.	Quantity.	Value.	Quantity.	Value
	(a) Reserved Forests.			Rs		Rs		Rs		Rs		Rs.
Cachar	Bamboos	No.	.....	.....	1,112,550	2,781	.....	.....	.....	.....	1,112,550	2,781
	Canes	bundles	.....	.....	27,872	1,737	...	.....	... ..	...	27,872	1,737
	Thatching-grass	c. ft.		..	175	2	...	.....	... ...	...	175	2
	Agar	*mahal*	....		.....	512	...	.....	.	.....	... ...	512
	Pathi	*dals*	...	.....	20,100	13	... ...	...	.....	...	20,100	13
	Total	...	.....	.		5,045	.. ...	...	...	...	...	5,045
Sylhet	Bamboos	No.	.....	.....	345,825	865	... ...	.....	.....	.....	345,825	865
	Canes	bundles	... ..	.	2,190	137	... ...		...	.....	2,190	137
	Reeds	c. ft.	.....	.....	370	12	.....	.....	... .	... ...	370	12
	Thaching-grass	,,	... ...	. ...	3,000		.....	.. ..	.	.....	3,000	3
	Pathi	*dals*	. ... ..	.. ...	24,600	15	.....	. ...	... ...	...	24,600	15
	Total		... .	.....	.. ..	1,032		...	...	- .. .	... ..	1,032
Goalpara	Bamboos	No.	.....	.....	...	... ...	2,385	32	.....	...	2,385	32
	Grazing	,,		... ..	...	.....	110	55	.....	.....	110	55
	Canes	bundles	..... .	.....	... ...	...	1,258	9	.....	.....	1,258	9
	Total	...	.....	....	.....	... ...	.....	96	.....	..... .	.....	96

Kamrup ...	Bamboos	No.	3,289	58	225	2	43,870	439	.....	...	47,384	499
	Canes	bundles	5	.....	1,600	12	3,940	29	.....	..	5,545	41
	Reeds ...	"	63	1	...	.....	...	.....	.....	.....	63	1
	Thatching-grass	"	22,100	66	... ...	.....	... ..	.....	..	... ...	22,100	66
	Trees for rearing silkworms	No.	..	... ..	9	1	....	.....	.....	.....	9	1
	Total ...	..	.....	125	...	15	...	468	.....	.....	... ...	608
Darrang ...	Bamboos	No.	.....	.....	100	1	.....	....		... .	100	1
	India-rubber	maunds	5 seers.	6	9	179	...			.....	9	185
	Total ...		...	6	...	180	.....	.....	. ...	...		186
Nowgong ...	Bamboos	No.	... . ..	...	1,350	13	500	5	.....		1,850	18
	Canes	bundles	.....	.....	4,275	32	.....		..	.....	4,275	32
	Thatching-grass	c. ft.	. ... .	... ..	2,600	13	.....	....	...	...	2,600	13
	Total		.. .. ..	...	....	58	.. ...	5	.. ...		.....	63
Sibsagar ...	Bamboos .	No.	.....	. .....	9,025	63	.....	.....		.. ..	9,025	63
	Grazing ...	"	...	... .	524	237	..... .	..... .	...	.....	524	237
	Canes	bundles	...	...	1,900	14	. ...		...	...	1,900	14
	Reeds	c. ft.		.....	3	.....	...	...	...	.. ..	3	... ...
	Thatching-grass ..	"	.....	.....	2,800	7	... . .	. ...	... ...	....	2,800	7
	Nal	"	.	.....	25	1	.....	.....	...	... ..	25	1
	Bilgrass (*Phrynium dichotomum*)	*mahal*	.....	. .. ...	...	107	...	... ..	.....	... .	... ...	107
	Total ...	...	...	....	.. ..	429	..	.....	... ..	.....	... .	429
Lakhimpur	Grazing	No.		...	20	20	... ...	... ..	.. ...	...	20	20
	Pathi ...	*dals*	...	.....	4,700	3	... .	... .	....	...	4,700	3
	Total ...		. . ...	...	.....	23	.....	...		.....	.....	23
Khasi and Jaintia Hills	Fodder grass	loads	.....	...	224	14	...	... ..		.....	224	14
	Reeds	"		..	31	4	.....	...	.....	... ...	31	4
	Total		....	...	...	18		... ...	.. ..	.....	.....	18

FORM No. 58—*continued.*

Division.	Description of produce.		Produce removed or utilized: By Government Agent. Quantity.	By Government Agent. Value.	By purchasers. Quantity.	By purchasers. Value	By free grants. Quantity.	By free grants. Value	By right-holders. Quantity.	By right-holders. Value	Total. Quantity.	Total. Value.
				Rs		Rs.		Rs.				Rs
Garo Hills ...	Foreign *gurkati* permits	No	...	..	188	376	.....	.....	... ...	.....	188	376
	Garo " "	"	... ...	... ...	6	6	... ..	.....	.....	.. ...	6	6
	Grazing ...	"	...	.....	...	...	20	5	...	.....	20	5
	Elephant tusk ...	"	... ...	...		251	.....	....	... .	... .	1	251
	Total	...	..	... ...	.....	633	.....	5	...	.....	.....	638
	Total Reserved Forests	...	... .	131	... ...	7,433	..	574	...	... .	... .	8,138
	(b) Unclassed State Forests and Waste Lands.											
Cachar ...	Bamboos	No.	2,700	7	240,325	601	61,300	153	.....	. ...	304,325	761
	Canes	bundles	.....	.....	1,191	74	1,648	103	.....	... ...	2,839	177
	Reeds	c. ft.	.....	.....	.....	....	816	102	.. ..	. .	816	102
	Thatching-grass ...	"	.....	.....	2,025	20	12,375	124	.....	.. .	14,400	144
	Pathi	*dals*	.....	... ...	13,000	8	...	....	.....	. .	13,000	8
	Agar	*mahals*	.....	.....	....	511	. .	. ...	.....	.. . .	.....	511
	Total	...	.....	7	.....	1,214	.....	482	.....	... ...	.....	1,703
Sylhet ...	Bamboos	No.	.....	...	1,396,640	3,491	1,696,400	4,077	.....	.....	3,093,040	7,568
	Grazing	"	.....		24	12	.. ..	. .	.....	... ...	24	12
	Canes	bundles	.....	.....	4,740	296	25,916	1,619	.....	....	30,656	1,915
	Reeds	c. ft.	... ..	...	8,376	262	40,806	1,275	....	. ... ..	49,182	1,537
	Thatching-grass	"	...		2,811,930	2,343	1,000,650	834	.....	...	3,812,580	3,177
	" " ..	*mahals*	. .....	.....	.....	3,645	. ...	. .....	.....	... .	.....	3,645
	Bankar ..	"	. .....	.....	..	100	.....	.....	.. .	... .	... ...	100
	Pathi . ..	*dals*	... .. .	. ...	57,335	36	22,745	15	...	...	80,080	51
	Stone	..	.... .	... ..	.. . .	235	.....	.....	.....		... .	235
	Fruits ...	...	.....	.....	....	9	..... .	...	.....	...		9
	Total ...	...	.....	.....	. ..	10,429	....	7,820	..... .	.....	.....	18,249

Goalpara	Bamboos	No.	.....	.....	150	3	.....	.....	.....	.....	150	3
	Grazing	"	.....	.....	506	241	.....	.....	.....	.....	506	241
	Canes	bundles	.....	.....	16,481	123	1,090	8	.....	.....	3,796	131
	Elephant tusks	No.	.....	.....	4	292	.....	.....	.....	.....	4	292
	Reeds	bundles	.....	.....	36,375	1,137	.....	.....	.....	.....	36,375	1,137
	Thatching-grass	"	.....	.....	797,200	1,993	.....	.....	.....	.....	797,200	1,993
	Total	...	.....	.....	.....	3,789	.....	8	.....	.....	.....	3,797
Kamrup	Bamboos	No.	.....	.....	400	7	38,700	387	.....	.....	39,100	394
	Canes	bundles	.....	.....	1,000	8	18	.....	.....	.....	1,018	8
	Grazing	No.	.....	.....	1,404	698	.....	.....	.....	.....	1,404	698
	Total	...	.....	.....	.....	713	.....	387	.....	.....	.....	1,100
Darrang	Bamboos	No.	.....	.....	1,100	18	18,880	258	.....	.....	19,980	276
	Grazing	"	.....	.....	1,669	833	.....	.....	.....	.....	1,669	833
	Canes	bundles	.....	.....	100	1	8,963	67	.....	.....	9,063	68
	Cane	*mahals*	.....	.....	.....	380	.....	.....	.....	.....	.....	380
	Pipul	"	.....	.....	.....	430	.....	.....	.....	.....	.....	430
	Total	...	.....	.....	.....	1,662	.....	325	.....	.....	.....	1,987
Nowgong	Bamboos	No.	.....	.....	10,221	124	15,300	153	.....	.....	25,521	277
	Grazing	"	.....	.....	2,230	1,115	.....	.....	.....	.....	2,230	1,115
	Fodder grass	bundles	.....	.....	16	1	.....	.....	.....	.....	16	1
	Canes	"	.....	.....	42,000	315	665	5	.....	.....	42,665	320
	Thatching-grass	c. ft.	.....	.....	1,200	6	.....	.....	.....	.....	1,200	6
	Reeds	loads	.....	.....	35	2	.....	.....	.....	.....	35	2
	Total	...	.....	.....	.....	1,563	.....	158	.....	.....	.....	1,721
Sibsagar	Bamboos	No.	.....	.....	3,712	57	41,014	410	.....	.....	44,726	467
	Grazing	"	.....	.....	2,650	1,303	.....	.....	.....	.....	2,650	1,303
	India-rubber	mds.	.....	.....	3	37	.....	.....	.....	.....	3	37
	Canes	bundles	.....	.....	3,802	29	12,800	96	.....	.....	16,602	125
	Cane	*mahal*	.....	.....	.....	1,100	.....	.....	.....	.....	.....	1,100
	Lac	"	.....	.....	.....	7	.....	.....	.....	.....	.....	7
	Agar	"	.....	.....	.....	600	.....	.....	.....	.....	.....	600
	Thatching-grass	c. ft.	.....	.....	600	2	.....	.....	.....	.....	600	2
	Total	...	.....	.....	.....	3,135	.....	506	.....	.....	.....	3,641

FORM No. 58—*continued.*

Division.	Description of produce.		Produce removed or utilized									
			By Government agent.		By purchasers.		By free grants.		By right-holders.		Total.	
			Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
				Rs.		Rs.		Rs.		Rs.		Rs.
Lakhimpur ...	Bamboos	No.	...	...	31,950	578	7,625	119	...	...	39,575	697
	Grazing	"	...	...	4,062	1,733	...	...	...	...	4,062	1,733
	Canes	bundles	...	...	125	1	472	4	...	...	597	5
	Pathi	*dals*	...	...	41,150	26	13,900	9	...	...	55,050	35
	Cane	*mahal*	...	...	...	1,016	...	...	...	...	...	1,016
	India-rubber ...	mds.	...	...	758	9,101	...	...	...	...	758	9,101
	Total	...	...	...	...	12,455	...	132	...	...	...	12,587
Khasi and Jaintia Hills	Grazing	No.	...	...	...	...	57	14	...	...	57	14
	Fodder grass ...	loads	...	...	91	6	...	...	...	...	91	6
	Stone	heaps	...	...	62	62	...	...	...	...	62	62
	Thatching-grass ...	loads	...	...	91	11	...	...	...	...	91	11
	Cassia (cinnamon) ...	*mahal*	...	...	...	76	...	...	...	...	...	76
	Fruits	...	...	...	...	11	...	...	...	...	...	11
	Total	...	...	...	...	166	...	14	...	...	...	180
Garo Hills ...	Foreign *gurkati* permits	No.	...	...	3,915	7,830	2	4	15	30	3,932	7,864
	Garo " "	"	...	...	2,072	2,072	...	...	...	...	2,072	2,072
	Bamboos	"	...	...	50	1	1,500	12	...	...	1,550	13
	"	raft	...	...	1	1	...	...	...	...	1	1
	" mats ...	No.	...	...	26	2	...	...	...	...	26	2
	Grazing	"	...	...	2,631	1,092	...	...	...	...	2,631	1,092
	Total	...	...	...	...	10,998	...	16	...	30	...	11,044
	Total Unclassed Forests	...	...	7	...	46,124	...	9,848	...	30	...	56,009
	Grand total ...	...	...	138	...	53,557	...	10,422	...	30	...	64,147

Abstract of the Circle.

Foreign *gurkati* permits	No.	.....	.....	4,103	8,206	2	4	15	30	4,105	8,240
Garo " "	"	.....	.....	2,078	2,078	.....	.....	.....	.....	2,078	2,078
Bamboos	"	5,989	65	3,153,623	8,605	1,927,474	6,045	.....	...	5,087,086	14,715
"	raft.	.....	.....	1	1	.....	.....	.....	.....	1	1
" mats ...	No.	.....	.....	26	2	.....	.....	.....	.....	26	2
Grazing	"	.....	.....	15,720	7,284	187	74	.....	.....	15,907	7,358
Fodder grass ...	bundle	.....	.....	331	21	.....	.....	.....	.....	331	21
Canes	"	5	.....	107,276	2,779	56,770	1,940	.....	.....	164,051	4,719
Reeds	c. ft.	63	1	45,190	1,417	41,622	1,377	.....	.....	86,875	2,795
Nal	"	.....	.....	25	1	.....	.....	.....	.....	25	1
Thatching-grass ...	"	22,100	66	3,621,621	4,400	1,013,025	958	.....	.....	4,656,746	5,424
Pathi	*dals*	.....	.....	160,885	101	36,645	24	.....	.....	197,530	125
India-rubber ..	mds.	5 seers.	6	770	9,317	.....	.....	.....	.....	775	9,323
Elephant tusks ...	No.	.....	.....	5	543	.....	.....	.....	.....	5	543
Fruits	"	.....	.....	.....	20	.....	.....	.....	.....	.....	20
Stones	...	.....	.....	.....	297	.....	.....	.....	.....	.....	297
Trees for rearing silkworm	"	.....	.....	9	1	.....	.....	.....	.....	9	1
Cane	*mahal*	.....	.....	.....	2,496	.....	.....	.....	.....	.....	2,496
Agar	"	.....	...	.....	1,623	.....	.....	.....	.....	.....	1,623
Lac	"	.....	.....	.....	7	.....	.....	.....	.....	.....	7
Thatching-grass ...	"	.....	.....	.....	3,645	.....	.....	.....	.....	.....	3,645
Bilgrass (*Phrynium dichotomum*)	"	.....	.....	.....	107	.....	.....	.....	.....	.....	107
Pipul (pepper) ...	"	.....	.....	.....	430	.....	.....	.....	.....	.....	430
Cassia (cinnamon) ...	"	.....	.....	.....	76	.....	.....	.....	.....	.....	76
Bankar.	"	.....	.....	.....	100	.....	.....	.....	.....	.....	100
Total	...	.....	138	.....	53,557	.....	10,422	.....	30	.....	64,147

FORM No. 59.

FOREST DEPARTMENT, ASSAM.—ACCOUNT OF TIMBER AND OTHER PRODUCE CUT OR COLLECTED BY GOVERNMENT AGENCY AND BROUGHT TO DEPÔTS, SOLD LOCALLY, OR OTHERWISE DISPOSED OF, DURING THE YEAR 1893-94.

Particulars.	Number or quantity.	Cubic feet.	Total of each head. Number or quantity.	Total of each head. Cubic feet.
Balance at commencement of the year.				
Cachar Division—				
Drift boats (miscellaneous) ...	10	300		
„ bamboos No.	200	.....		
„ canes bundles	120	.....	10	300
Goalpara Division—				
Sâl logs	3,219	46,015		
Gunserai logs	35	560		
Sam „	65	1,384	3,319	47,959
Kamrup Division—				
Sâl logs	244	4,594		
„ sleepers	10	15		
Poma planks	30	38		
Drift wood (Sâl)	17	118		
Sâl scantlings	12	9		
Confiscated boat (Sâl) ..	10	236		
Drift Amori boat	1	23		
Teak poles . .	12	29		
Bamboos . No.	160	.....		
Canes ... bundles	38	.....		
Reeds .. c. ft.	26	.....		
Thatching-grass ... „	200	.....	336	5,062
Garo Hills Division—				
Sâl logs	1,005	8,826		
First-class logs	23	333		
Second-class logs	10	130		
Sâl sleepers B. G.	15	52		
„ beams .	23	176		
„ planks	6	5		
„ scantlings	4	3		

Particulars.	Number or quantity.	Cubic feet.	Total of each head. Number of quantity.	Total of each head. Cubic feet.
Removed by Purchasers from Sale Depôts.				
Sâl logs	1,764	29,287		
Sam „	65	1,387		
Gunserai logs	34	545		
Teak poles	7	21		
Sâl planks	40	66		
„ scantlings	3	3		
Sam planks	56	60		
„ scantlings	6	2		
Confiscated dead wood (Sâl) ...	10	40		
„ boat (do.) ...	8	283		
„ Sâl logs	15	72		
„ „ sleepers ...	15	20		
„ sleepers (miscellaneous)	131	1,310		
„ Sâl scantlings .	11	5		
„ dead wood (miscellaneous)	31	310		
Drift wood (Sâl)	83	716		
„ „ (miscellaneous) ...	3,544	122,472		
„ boats (ditto) ...	14	420		
„ fire-wood ... mds.	6,424	12,849		
Waif sleeper N. G.	1	1		
India-rubber ... Seers	22	.....		
Canes ... ... bundles	120	.....	12,262	169,869
Received from the Forest and sold locally.				
First-class logs ...	6	219		
Drift wood (miscellaneous) ...	321	3,212		
„ second-class boat ...	1	50		
„ firewood ... mds.	24	48	352	3,529

Sam planks	117	110		
„ scantlings	13	13		
Jarul planks	21	21		
			1,237	9,669
Received from Forest in Sale Depôts.				
Sâl logs .	2,278	41,610		
„ planks	886	1,315		
„ beams .	17	97		
„ scantlings	11	14		
Sam „	3	1		
Teak poles	2	9		
Jati bamboos ... No.	3,259	....		
Bhaluka bamboos ... „	30	.....		
Thatching-grass ... c. ft.	22,100	.....		
Reeds .. „	63	. .		
Canes ... bundles	5	.....		
India-rubber .. Seers	22	.....		
Received by measurement in Depôts.			3,197	43,046
Confiscated boat (Sâl) .	.....	31		
Sâl logs	.....	3		
Sam planks	.....	11		
Received by Conversion in Depôts.			.....	45
Sâl planks	174	218		
			174	218
Received by Confiscation and Collection in Depôts.				
Confiscated dead wood (Sâl) ...	10	40		
„ „ (miscellaneous)	31	310		
„ boats (Sâl) ...	4	144		
„ Amori boat ...	1	50		
„ Jarul planks ...	6	2		
„ „ slabs . .	2	1		
Confiscated Sâl sleepers ...	15	20		
„ second-class sleepers ...	131	1,310		
„ Sâl scantlings ..	11	5		

Converted in Sale Depôts.				
Sâl logs	9	270		
			9	270
Made over to Claimants.				
Confiscated Sâl boats ...	4	84		
			4	84
Reduced by remeasurement in Sale Depôts.				
Sâl logs	.....	1,364		
Drift wood (Sâl)	. ...	8		
			.....	1,372
Lost or written off as useless.				
Sâl logs	7	56		
„ planks	2	2		
Gunserai log	1	15		
Sam planks	6	6		
			16	79
Used departmentally.				
Sâl logs	169	2,233		
„ planks	39	57		
„ scantlings	6	4		
„ beams	2	9		
Poma planks . . .	20	25		
Sam „	34	34		
„ scantlings	2	5		
Sâl „	13	15		
Jarul planks	19	18		
„ slab	1	.....		
Teak poles	4	10		
First-class log	1	25		
Jati bamboos ... No.	2,601	.... .		
Bhaluka bamboos ... „	30	.....		
Reeds ... c. ft.	49	.....		
Thatching-grass . „	18,900	.....		
Canes ... bundles	43	... .		
			310	2,435
Balance at close of the year.				
Cachar Division—				
Drift wood (Miscellaneous) ...	3	154		
			3	154

FORM No. 59—*continued.*

Particulars.	Number or quantity	Cubic feet.	Total of each head		Particulars	Number or quantity	Cubic feet	Total of each head.	
			Number or quantity.	Cubic feet.				Number or quantity	Cubic feet.
Drift wood (Sâl) ...	66	606			Goalpara Division—				
„ „ (miscellaneous) ...	3,517	122,626			Sâl logs ...	3,777	58,912	3,777	58,912
„ boats (ditto) ...	4	120			Kamrup Division—				
„ firewood ... mds.	6,424	12,849			Sâl logs	4	33		
„ bamboos No	2,700	....			„ sleepers ..	10	15		
Waif sleeper N. G.	1	1			„ beams ...	15	88		
					„ planks	983	1,412		
Received from the Forest and sold locally.			10,253	138,084	„ scantlings	6	5		
					Poma planks	10	13		
First-class logs	6	219			Teak poles	3	8		
Drift wood (miscellaneous)	321	3,210			Confiscated boats (Sâl)	2	43		
„ first-class boat	1	50			Drift Amori boats	2	73		
„ firewood mds.	24	48			Bamboos . . No.	50			
			352	3,527	Thatching-grass c. ft.	3,400	.....		
					Reeds ... „	40	... ...		
					Garo Hills Division—			1,035	1,690
					Sâl logs	999	8,784		
					First-class logs ..	22	308		
					Second „ „	10	130		
					Sâl sleepers B. G.	15	52		
					„ beams ...	23	177		
					„ planks	2	1		
					„ scantlings ...	5	5		
					Sam planks ...	21	20		
					„ scantlings	2	...		
					Jarul planks	8	5		
					„ slab ...	1	... .		
					Dead wood (Sâl)	2	34		
								1,110	9,516
Grand total		.. ..	18,878	247,910	Grand total ...	.....	.....	18,878	247,910

FORM No. 60(*a*)

FOREST DEPARTMENT, ASSÂM —ABSTRACT SHOWING THE VALUE OF TIMBER AND OTHER PRODUCE AT SALE DEPÔTS FOR THE YEAR 1893-94.

Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year			Difference in value.	
	No.	C ft	Value	No.	C ft.	Value.	In favour of the year	Against the year.
CACHAR DIVISION.			Rs.			Rs.	Rs	Rs.
Drift boats (Misc.)	10	300	20			...	...	20
„ bamboos No.	200		1					1
„ canes bundles	120		2			...		2
„ wood (Misc.)	...	...	.	3	154	10	10	...
Total ...	...		23		...	10	10	23
GOALPARA DIVISION.								
Sâl logs ...	3,219	46,015	31,635	3,777	58,912	36,817	5,182	...
Gunserai logs .	35	560	385				.	385
Sam „ ...	65	1,384	934		.		...	934
Total			32,954			36,817	5,182	1,319
KAMRUP DIVISION.								
Sâl logs. .	244	4,594	2,025	4	33	16		2.000
Poma planks* ..	30	38	38	10	13	13		25
Sâl sleepers ...	10	15	10	10	15	10	...	...
„ planks ...	..	...	..	983	1,412	703	703	...
„ scantlings	12	9	9	6	5	4	...	5
„ beams	...	...	...	15	88	45	45	..
Drift wood (Sâl) ...	17	118	44	...	...	...	...	44
Confiscated Sâl boats	10	236	190	2	43	38	...	152
Drift Amori boats ...	1	23	15	2	73	30	15	...
Teak poles ...	12	29	12	3	8	3	...	9
Bamboos ... No.	160	...	3	50	...	1	. .	2
Canes ... bundles	38	...	..	...	...	...	..	...
Reeds ... c. ft.	26	...	1	40	...	1	.	...
Thatching-grass „	200	...	1	3,400	..	16	15	...
Total ...	...		2,348	...	...	880	778	2,246

* This was erroneously shown as Sâl by the Divisional Officer

FORM NO. 60(*a*)—*continued.*

Description of timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
	No.	C. ft.	Value.	No.	C. ft.	Value.	In favour of the year.	Against the year.
GARO HILLS DIVISION.			Rs.			Rs.	Rs.	Rs.
Sâl logs ...	1,005	8,826	4,636	999	8,784	4,610	...	26
First-class logs ...	23	333	248	22	308	240	...	8
Second " ...	10	130	97	10	130	97	...	...
Sâl sleepers, B.G. ...	15	52	15	15	52	15	...	...
" beams ...	23	176	59	23	176	59	...	...
" posts (dead wood)	...	...	...	2	34	17	17	...
" planks ...	6	5	3	2	1	1	...	2
" scantlings ...	4	3	3	5	5	5	2	...
Sam " ...	13	13	16	2	...	1	...	15
" planks ...	117	110	144	21	20	20	...	124
Jarul " ...	21	21	21	8	5	5	...	16
" slab ...	...	...	...	1	...	1	1	...
Total	...	...	5,242	...	...	5,071	20	191
Grand total ...	...	...	40,567	...	...	42,778	5,990	3,779
Net difference in favour of the year	...	...	...	...	...	...	2,211	...

FORM NO. 60(*b*).

FOREST DEPARTMENT, ASSAM.—ABSTRACT SHOWING THE VALUE OF LIVE AND DEAD STOCK FOR THE YEAR 1893-94.

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	No.	Value.	No.	Value.	In favour of the year.	Against the year.
DIRECTION DIVISION.		Rs.		Rs.	Rs.	Rs.
Stores, Tools and Plant.						
Surveying and other instruments ...	376	1,330	340	1,215	...	115
Tools	224	256	179	214	...	42
Office and rest-house furniture ...	120	1,657	118	1,653	...	4
Tents	2	190	2	190	...	...
Miscellaneous	...	450	...	254	...	196
Total	...	3,883	...	3,526	...	357

FORM No. 60(*b*)—*continued.*

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	No.	Value.	No.	Value.	In favour of the year.	Against the year.
		Rs.		Rs.	Rs.	Rs.
CACHAR DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ...	11	293	14	305	12	...
Tools	219	420	200	382		38
Office and rest-house furniture ...	97	1,187	102	1,227	40	..
Tents	1	30	1	30	..	...
Miscellaneous	...	343	...	360	17	...
Buildings.						
Divisional and office bungalows—						
Revenue stations and inspection houses.	10	8,035	10	8,035	...	...
Other houses ...	33	1,017	37	1,167	150	...
Live Stock.						
Elephant	1	1,500	1	1,500	.	..
Total	...	12,825	...	13,006	219	38
SYLHET DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ...	35	151	35	151	...	....
Tools	75	282	48	182	...	100
Office and rest-house furniture ...	80	1,273	96	1,335	62	...
Miscellaneous	...	359	...	362	3	...
Buildings.						
Office and rest-houses	9	825	9	858	33	...
Other houses	23	455	28	548	93	...
Total	...	3,345	...	3,436	191	100

FORM No. 60(*b*)—*continued.*

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year		Difference in value.	
	No.	Value	No.	Value.	In favour of the year.	Against the year.
OALPARA DIVISION.		Rs.		Rs.	Rs.	Rs.
Stores, Tools and Plant.						
Surveying and other instruments ..	29	79	32	194	115	...
Machinery	4	400	4	350	...	50
Tools	375	323	338	275	...	48
Office and rest-house furniture ...	98	822	133	1,095	273	...
Miscellaneous	...	1,160	...	1,275	115	.....
Buildings.						
Dhubri bungalow	1	8,000	1	8,000	..	..
Divisional office godown	2	2,000	2	2,000		..
Other houses	28	2,850	75	3,753	903	..
Live Stock.						
Elephants	14	19,250	12	16,800	..	2,450
Total	...	34,884	...	33,742	1,406	2,548
KAMRUP DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ...	41	117	55	340	223	
Tools	692	1,770	750	1,824	54	...
Office and rest-house furniture ...	92	1,035	108	1,244	209	...
Tent ...	1	15	1	15	...	...
Miscellaneous ...	...	2,210	...	2,228	18	...
Buildings.						
Gauhati bungalow ...	1	5,658	1	5,658	...	...
Kulsi plantation bungalow	1	3,000	1	3,000		...
Other houses	63	854	70	1,167	313	..
Live Stock.						
Elephants	5	8,000	5	8,000		...
Total	...	22,659	...	23,476	817	...

FORM No. 69(*b*)—*continued.*

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	No.	Value.	No.	Value.	In favour of the year.	Against the year.
		Rs.		Rs.	Rs.	Rs.
DARRANG DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ...	50	220	55	210	...	10
Tools	659	1,100	760	1,200	100	
Office and rest-house furniture ...	103	1,100	106	1,130	30	...
Miscellaneous	...	440	...	420	...	20
Buildings.						
Plantation bungalow	1	4,700	1	4,750	50	...
Bhairabighat bungalow and inspection houses	3	3,400	3	4,400	1,000	...
Other houses	19	1,100	19	1,000	...	100
Live Stock.						
Elephants	2	2,300	2	2,000		300
Total	...	14,360	...	15,110	1,180	430
NOWGONG DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ..	16	127	28	176	49	
Tools	219	250	218	248		2
Office and rest-house furniture ...	42	715	45	903	188	...
Tent	1	100	1	100	...	...
Miscellaneous	...	11	...	9	...	2
Buildings.						
Inspection houses ...	2	245	2	235	...	1
Other houses	13	180	14	350	170	...
Live Stock.						
Elephant	1	700	...		...	700
Total	...	2,328	...	2,021	407	714

FORM No. 60(b)—*continued.*

Description of live and dead stock.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.	
	No.	Value.	No.	Value.	In favour of the year.	Against the year.
		Rs.		Rs.	Rs.	
SIBSAGAR DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments	31	55	31	[illegible]	...	...
Tools	243	187	243	187	...	...
Office and rest-house furniture ...	124	1,183	126	1,183	...	...
Tents	3	105	3	105	...	...
Miscellaneous	...	560	...	573	13	...
Buildings.						
Sibsagar bungalow	1	5,356	1	5,356	...	...
Golaghat bungalow and inspection houses	5	4,820	5	4,820	...	...
Other houses	26	705	26	705	...	...
Live Stock.						
Elephant	1	1,200	1	1,200	...	...
Total	...	14,171	...	14,184	13	...
LAKHIMPUR DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ...	32	671	32	671	..	...
Tools	86	349	86	349	...	...
Office and rest-house furniture ..	71	1,197	91	1,278	81	...
Tents	1	25	1	25	...	...
Miscellaneous	...	1,807	...	1,843	36	...
Buildings.						
Lakhimpur	1	8,510	1	8,510	...	...
Margherita	2	3,600	2	3,600	...	...
Other houses	...	2,676	...	2,749	73	...
Live Stock.						
Elephants	1	1,600	2	2,900	1,300	...
Total	...	20,435	...	21,925	1,490	...

FORM NO. 60(*b*)—*concluded.*

Description of live and dead stock	On hand at commencement of the year		On hand at close of the year		Difference in value	
	No	Value.	No	Value	In favour of the year.	Against the year
KHASI AND JAINTIA HILLS DIVISION.		Rs		Rs	Rs.	Rs.
Stores, Tools and Plant.						
Office and rest-house furniture ..	1	30	1	30	...	...
Tools	12	74	12	74	..	...
Miscellaneous	...	20	...	20	..	...
Buildings.						
Small houses	5	305	5	305	...	...
Total	...	429	...	429	..	..
GARO HILLS DIVISION.						
Stores, Tools and Plant.						
Surveying and other instruments ...	94	509	94	509	....	...
Tools	314	219	331	209	...	10
Office and rest-house furniture ...	52	1,205	55	1,266	61	...
Miscellaneous	...	435	...	475	40	
Buildings.						
Tura bungalow	1	5,437	1	5,437	...	...
godown ...	1	1,881	1	1,881	...	...
Inspection and other houses ...	10	2,109	18	2,398	289	...
Live Stock.						
Elephants	1	1,500	2	2,500	1,000	...
Total	...	13,295	...	14,675	1,390	10
Grand total	...	1,42,614	...	1,45,530	7,113	4,197
Net difference in favour of the year ...	...	...	...	...	2,916	...

FORM No. 61.

FOREST DEPARTMENT, ASSAM.—SUMMARY OF REVENUE OF THE DIFFERENT DIVISIONS DURING 1893-94.

Budget Heads.	Direction.	Cachar Division.	Sylhet Division.	Goalpara. Division.	Kamrup Division.	Darrang Division.	Nowgong Division.	Sibsagar Division.	Lakhimpur Division.	Khasi and Jaintia Hills Division.	Garo Hills Division.	Working Plans. Division.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
REVENUE.													
I.—Timber and other produce removed from the forests by Government Agency—													
a. Timber	.....	.....	.....	17,153 0 0	725 0 0	.....	.....	.....	.....	.....	96 0 0	.....	17,974 0 0
b. Firewood and charcoal	.....	.....	.....	.....	—26 0 0	.....	.....	.....	.....	.....	.....	.....	—26 0 0
c. Bamboos	.....	.....	.....	.....	36 0 0	.....	.....	.....	.....	.....	.....	.....	36 0 0
d. Sandal-wood	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
e. Grass and other minor produce	.....	.....	.....	.....	.....	6 0 0	.....	.....	.....	.....	.....	.....	6 0 0
Total I	.....	.....	.....	17,153 0 0	735 0 0	6 0 0	.....	.....	.....	.....	96 0 0	.....	17,990 0 0
II.—Timber and other produce removed from the forests by consumers or purchasers—													
a. Timber	1,083 0 0	74,179 0 0	20,172 0 0	26,319 0 0	58,706 0 0	13,208 0 0	32,610 0 0	14,992 0 0	55,314 0 0	395 0 0	17,290 0 0	.....	3,11,268 0 0
b. Firewood and charcoal	.....	2,063 0 0	1,623 0 0	84 0 0	277 0 0	285 0 0	1,020 0 0	778 0 0	1,513 0 0	50 0 0	.....	.....	7,693 0 0
c. Bamboos	.....	3,382 0 0	4,355 0 0	3 0 0	9 0 0	19 0 0	137 0 0	121 0 0	578 0 0	.....	.....	.....	8,604 0 0
d. Grazing and fodder grass	.....	.....	12 0 0	241 0 0	698 0 0	832 0 0	1,116 0 0	1,540 0 0	1,753 0 0	6 0 0	1,092 0 0	.....	7,290 0 0
e. Other minor produce	.....	2,876 0 0	6,976 0 0	3,546 0 0	205 0 0	990 0 0	367 0 0	4,903 0 0	10,146 0 0	183 0 0	251 0 0	.....	27,443 0 0
f. Forest stamps	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
g. Other items	.....	.....	115 0 0	.....	.....	.....	.....	.....	.....	.....	16,427 0 0	.....	16,542 0 0
Total II	1,083 0 0	82,500 0 0	33,253 0 0	30,193 0 0	59,895 0 0	15,334 0 0	35,250 0 0	16,334 0 0	69,304 0 0	634 0 0	35,060 0 0	.....	3,78,840 0 0
III.—Drift and waif wood and confiscated forest produce	.....	11,542 0 0	1,292 0 0	350 0 0	290 0 0	105 0 0	188 0 0	627 0 0	26 0 0	.....	311 0 0	.....	14,731 0 0
Total III	.....	11,542 0 0	1,292 0 0	350 0 0	290 0 0	105 0 0	188 0 0	627 0 0	26 0 0	.....	311 0 0	.....	14,731 0 0
IV.—Revenue from forests not managed by Government—													
a. Duty on foreign timber and other forest produce	.....	1,806 0 0	.....	304 0 0	580 0 0	11,669 0 0	.....	567 0 0	19,233 0 0	.....	.....	.....	34,159 0 0
b. Revenue from shared and private forests	.....	.....	.....	.....	3,909 0 0	.....	.....	.....	.....	674 0 0	382 0 0	.....	4,965 0 0
Total IV	.....	1,806 0 0	.....	304 0 0	4,489 0 0	11,669 0 0	.....	567 0 0	19,233 0 0	674 0 0	382 0 0	.....	39,124 0 0
V.—Miscellaneous—													
a. Fines and forfeitures	.....	233 0 0	329 0 0	10 0 0	110 0 0	265 0 0	94 0 0	652 0 0	436 0 0	5 0 0	794 0 0	.....	2,868 0 0
b. Refunds	5 0 0	17 0 0	32 0 0	14 0 0	21 0 0	14 0 0	1 0 0	4 0 0	5 0 0	7 0 0	5 0 0	.....	125 0 0
c. Other sources	174 0 0	6,213 0 0	23,031 0 0	2,264 0 0	2,609 0 0	442 0 0	766 0 0	1,106 0 0	1,829 0 0	5 0 0	694 0 0	.....	39,133 0 0
Total V	179 0 0	6,463 0 0	23,392 0 0	2,288 0 0	2,740 0 0	661 0 0	861 0 0	1,762 0 0	2,270 0 0	17 0 0	1,493 0 0	.....	42,126 0 0
Grand total Revenue	1,262 0 0	1,02,311 0 0	57,937 0 0	59,288 0 0	68,149 0 0	27,775 0 0	36,299 0 0	19,299 0 0	90,833 0 0	1,325 0 0	37,342 0 0	.....	4,92,811 0 0

EXPENDITURE.

A.—Conservancy and Works.

I.—Timber and other produce removed from the forests by Government Agency—													
a. Timber	.....	.....	..	4,050 0 0	27 0 0	.....	.....	.....	.....	.....	149 0 0	.....	5,032 0 0
b. Firewood and charcoal	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
c. Bamboos	.....	.....	.....	.....	16 0 0	.....	.....	.....	.....	.....	.....	.....	16 0 0
d. Sandal-wood	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
e. Grass and other minor produce	.....	.....	.....	.....	32 0 0	.....	.....	.....	.....	.....	.....	.....	32 0 0
Total A I	.....	.....	.....	*4,856 0 0*	*75 0 0*	.....	.....	.....	.....	.....	*149 0 0*	.....	*5,080 0 0*
II.—Timber and other produce removed from the forests by consumers or purchasers	.....	1,744 0 0	2,803 0 0	1,369 0 0	1,574 0 0	1,254 0 0	866 0 0	1,400 0 0	4,667 0 0	.....	6,325 0 0	.....	22,002 0 0
Total A II	.....	*1,744 0 0*	*2,803 0 0*	*1,369 0 0*	*1,574 0 0*	*1,254 0 0*	*866 0 0*	*1,400 0 0*	*4,667 0 0*	.....	*6,325 0 0*	.....	*22,002 0 0*
III.—Drift and waif wood and confiscated forest produce	.....	44 0 0	1 0 0	.....	4 0 0	.....	10 0 0	113 0 0	.....	.....	5 0 0	.....	177 0 0
Total A III	.....	*44 0 0*	*1 0 0*	.....	*4 0 0*	.....	*10 0 0*	*113 0 0*	.....	.....	*5 0 0*	.....	*177 0 0*
IV.—Revenue from forests not managed by Government—													
a. Duty on foreign timber and other forest produce	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
b. Revenue from shared and private forests	.....	.....	.....	.....	1,183 0 0	.....	.....	.....	.....	.....	404 0 0	.....	1,587 0 0
Total A IV	.....	.....	.....	.....	*1,183 0 0*	.....	.....	.....	.....	.....	*404 0 0*	.....	*1,587 0 0*
V.—Rent of leased forests and payments to shareholders in forests managed by Government	.....	.....	.....	.....	4,862 0 0	.....	.....	.....	.....	.....	.....	.....	4,862 0 0
Total A V	.....	.....	.....	.....	*4,862 0 0*	.....	.....	.....	.....	.....	.....	.....	*4,862 0 0*
VI.—Live stock, Stores, Tools and Plant—													
a. Purchase of cattle	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
b. Feed and keep of cattle	335 0 0	382 0 0	—25 0 0	4,883 0 0	1,889 0 0	1,165 0 0	339 0 0	475 0 0	552 0 0	.....	668 0 0	.....	10,668 0 0
c. Purchase of stores, tools and plant	92 0 0	151 0 0	170 0 0	893 0 0	395 0 0	81 0 0	236 0 0	14 0 0	117 0 0	.....	172 0 0	.....	2,321 0 0
Total A VI	*427 0 0*	*533 0 0*	*145 0 0*	*5,781 0 0*	*2,284 0 0*	*1,246 0 0*	*575 0 0*	*489 0 0*	*669 0 0*	.....	*840 0 0*	.....	*12,989 0 0*
VII.—Communications and buildings—													
a. Roads and bridges	.....	268 0 0	.....	104 0 0	1,621 0 0	1,286 0 0	.....	485 0 0	127 0 0	.....	1,018 0 0	.....	4,909 0 0
b. Buildings	.....	902 0 0	391 0 0	1,956 0 0	2,350 0 0	2,151 0 0	597 0 0	810 0 0	1,261 0 0	22 0 0	1,279 0 0	.....	11,719 0 0
c. Other works	.....	81 0 0	12 0 0	148 0 0	99 0 0	35 0 0	12 0 0	14 0 0	69 0 0	.....	87 0 0	.....	557 0 0
Total A VII	.....	*1,251 0 0*	*403 0 0*	*2,208 0 0*	*4,070 0 0*	*3,472 0 0*	*609 0 0*	*1,309 0 0*	*1,457 0 0*	*22 0 0*	*2,384 0 0*	.....	*17,185 0 0*
VIII.—Organization, improvement and extension of forests—													
a. Demarcation	.....	468 0 0	.....	675 0 0	581 0 0	158 0 0	466 0 0	447 0 0	357 0 0	18 0 0	648 0 0	.....	3,818 0 0
b. Cost of settlements, compensation for land and rights	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
c. Surveys	1 0 0	.....	.....	4,338 0 0	.....	.....	8 0 0	.....	260 0 0	.....	3 0 0	.....	4,610 0 0
d. Working plans	.....	135 0 0	582 0 0	46 0 0	.....	.....	.....	.....	.....	.....	.....	59 0 0	822 0 0
e. Sowing and planting	.....	70 0 0	.....	.....	392 0 0	7,674 0 0	.....	80 0 0	.....	—129 0 0	12 0 0	.....	8,099 0 0
f. Protection from fire	.....	.....	.....	4,390 0 0	1,687 0 0	513 0 0	1,609 0 0	3 0 0	.....	965 0 0	1,848 0 0	.....	11,015 0 0
g. Other works	362 0 0	668 0 0	2,834 0 0	1,355 0 0	1,876 0 0	361 0 0	2,371 0 0	1,660 0 0	807 0 0	698 0 0	946 0 0	.....	13,938 0 0
Total A VIII	*363 0 0*	*1,341 0 0*	*3,416 0 0*	*10,804 0 0*	*4,536 0 0*	*8,706 0 0*	*4,454 0 0*	*2,190 0 0*	*1,424 0 0*	*1,552 0 0*	*3,457 0 0*	*59 0 0*	*42,302 0 0*

FORM No. 61—*continued.*

Budget Heads.	Direction.	Cachar Division.	Sylhet Division.	Goalpara Division.	Kamrup Division.	Darrang Division.	Nowgong Division.	Sibsagar Division.	Lakhimpur Division.	Khasi and Jaintia Hills Division.	Garo Hills Division.	Working Plans Division.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
IX.—Miscellaneous—													
a. Refunds	.....	.....	70 0 0	.....	21 0 0	44 0 0	.....	138 0 0	193 0 0	.....	.....	.....	466 0 0
b. Law charges	.....	220 0 0	120 0 0	.....	45 0 0	50 0 0	.....	5 0 0	240 0 0	.....	.....	.....	680 0 0
c. Other charges	172 0 0	179 0 0	35 0 0	149 0 0	383 0 0	161 0 0	218 0 0	29 0 0	147 0 0	.....	293 0 0	2 0 0	1,768 0 0
Total A IX	*172 0 0*	*399 0 0*	*225 0 0*	*149 0 0*	*449 0 0*	*255 0 0*	*218 0 0*	*172 0 0*	*580 0 0*	.....	*293 0 0*	*2 0 0*	*2,914 0 0*
Total A.—Conservancy and Works	962 0 0	5,312 0 0	6,993 0 0	25,167 0 0	19,037 0 0	14,933 0 0	6,732 0 0	5,673 0 0	8,797 0 0	1,574 0 0	13,857 0 0	61 0 0	1,09,098 0 0
B.—ESTABLISHMENTS.													
I.—Salaries—													
a. Conservators	16,732 0 0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16,732 0 0
b. Superior officers	697 0 0	6,600 0 0	3,005 0 0	9,309 0 0	7,387 0 0	9,920 0 0	366 0 0	700 0 0	10,172 0 0	.....	6,567 0 0	.....	54,723 0 0
c. Subordinate forest and depôt establishments ...	443 0 0	3,833 0 0	992 0 0	4,138 0 0	3,721 0 0	2,688 0 0	908 0 0	3,101 0 0	3,259 0 0	1,174 0 0	3,072 0 0	100 0 0	27,439 0 0
d. Office establishments	5,916 0 0	1,122 0 0	1,036 0 0	1,302 0 0	1,384 0 0	959 0 0	1,086 0 0	1,196 0 0	1,202 0 0	.....	1,409 0 0	16 0 0	16,688 0 0
e. Deputation and special allowances	1,056 0 0	.....	.....	49 0 0	.....	.....	1,180 0 0	.....	1,100 0 0	.....	1,197 0 0	200 0 0	4,782 0 0
f. Exchange compensation allowance	2,125 0 0	816 0 0	.....	990 0 0	772 0 0	1,202 0 0	145 0 0	.....	1,170 0 0	.....	519 0 0	.....	7,733 0 0
Total B I	*26,969 0 0*	*12,365 0 0*	*5,093 0 0*	*15,788 0 0*	*13,264 0 0*	*14,769 0 0*	*3,685 0 0*	*4,997 0 0*	*16,903 0 0*	*1,174 0 0*	*12,764 0 0*	*316 0 0*	*1,28,087 0 0*
II.—Travelling Allowances—													
a. Conservators	2,387 0 0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,387 0 0
b. Superior officers	.....	1,462 0 0	556 0 0	2,550 0 0	959 0 0	2,598 0 0	42 0 0	125 0 0	1,717 0 0	.....	2,403 0 0	.....	12,412 0 0
c. Subordinate forest and depôt establishments ...	196 0 0	607 0 0	197 0 0	761 0 0	391 0 0	669 0 0	233 0 0	411 0 0	1,252 0 0	90 0 0	335 0 0	.....	5,142 0 0
d. Office establishments	93 0 0	13 0 0	52 0 0	.....	.....	14 0 0	167 0 0	193 0 0	85 0 0	.....	8 0 0	—1 0 0	624 0 0
Total B II	*2,676 0 0*	*2,082 0 0*	*805 0 0*	*3,311 0 0*	*1,350 0 0*	*3,281 0 0*	*442 0 0*	*729 0 0*	*3,054 0 0*	*90 0 0*	*2,746 0 0*	*—1 0 0*	*20,565 0 0*
III.—Contingencies—													
a. Stationery	12 0 0	.....	9 0 0	2 0 0	4 0 0	2 0 0	3 0 0	1 0 0	7 0 0	.....	5 0 0	.....	45 0 0
b. Carriage of tents and records	65 0 0	.....	.....	6 0 0	100 0 0	.....	30 0 0	2 0 0	19 0 0	.....	5 0 0	.....	227 0 0
c. Rents, rates and taxes	1,270 0 0	60 0 0	21 0 0	36 0 0	122 0 0	.....	.....	48 0 0	51 0 0	.....	.....	.....	1,608 0 0
d. Pay of police guards	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
e. Official postage	240 0 0	116 0 0	282 0 0	92 0 0	151 0 0	151 0 0	155 0 0	209 0 0	144 0 0	.....	159 0 0	.....	1,690 0 0
f. Sundries	778 0 0	394 0 0	157 0 0	611 0 0	671 0 0	207 0 0	423 0 0	211 0 0	299 0 0	9 0 0	329 0 0	12 0 0	4,101 0 0
Total B III	*2,365 0 0*	*570 0 0*	*469 0 0*	*747 0 0*	*1,048 0 0*	*360 0 0*	*611 0 0*	*471 0 0*	*520 0 0*	*9 0 0*	*489 0 0*	*12 0 0*	*7,671 0 0*
Total B.—Establishments	32,010 0 0	15,017 0 0	6,367 0 0	19,846 0 0	15,662 0 0	18,410 0 0	4,738 0 0	6,197 0 0	20,477 0 0	1,273 0 0	15,999 0 0	327 0 0	1,50,323 0 0
Grand Total of Expenditure	32,972 0 0	20,329 0 0	13,360 0 0	45,013 0 0	34,699 0 0	33,343 0 0	11,470 0 0	11,870 0 0	29,274 0 0	2,847 0 0	29,856 0 0	388 0 0	2,65,421 0 0

I. C. BOSE,

Assistant Comptroller General (Forests).

FORM No. 62.

FOREST DEPARTMENT, ASSAM.—ACCOUNT CURRENT FOR THE YEAR 1893-94.

	Rs. a. p.	Rs. a. p.		Rs. a. p.	Rs. a. p.
To Cash Balance	...	1,799 6 4	By Expenditure as per Annual Summary, Form No. 61 ...	...	2,65,421 0 8
„ VIII.—Assessed Taxes—Income Tax—Deductions from salaries ...	...	2,377 11 9	„ Deposits	...	...
„ Revenue as per Annual Summary, Form No. 61 ...	...	4,92,811 1 1	„ Forest Cash Remittances—Local—Remittances to Treasuries ...	4,90,722 4 7	...
„ Service Funds—			„ Inter-Divisional Transfers ...	650 0 0	4,91,372 4 7
Civil Fund—Ordinary, Bengal	...	...	„ Advances Recoverable ...	...	1,68,131 1 8
„ „ Additional, Bengal	...	...	„ Suspense	...	99 13 0
Military Fund—Bengal ...	...	..	„ Account Current (other Governments)—		
„ „ Madras ...	...	...	Remittances to the Government of India ...	1,295 4 6	...
„ Orphan Fund.—Bengal	...	...	Remittances to the Government of Bengal ...	25 0 0	1,320 4 6
Uncovenanted Service Family Pension Fund—Bengal ...	430 10 0	430 10 0	„ Inter-Departmental Transfers—		
General Family Pension Fund...	...	...	Public Works Department, ordinary	2,728 7 3	...
Hindu Family Annuity Fund...	...	...	State Railways ...	2 8 0	...
„ Deposits	...	...	Telegraph Department ...	37 13 0	...
„ Forest Cash Remittances—Local—			Civil Department (miscellaneous)	287 7 4	...
Forest cheques drawn ...	2,48,511 10 2	...	Civil Department, Jail ...	15 0 0	3,071 3 7
Inter-Divisional Transfers ...	707 6 8	2,49,219 0 10	Cash Balance	...	1,004 14 11
„ Advances recoverable ...	...	1,73,613 6 4			
„ Suspense	...	247 13 0			
„ Account Current (other Governments)—					
Remittances from Government of India	7,537 14 7	...			
Remittances from Government of Bengal	653 15 0	8,191 13 7			
Inter-Departmental Transfers—					
Public Works Department ...	...	...			
Military Department, Bengal ...	2 0 0	2 0 0			
Civil Department—					
Jail	...	...			
Mathematical Instrument Department	84 10 0	...			
Miscellaneous	1,643 2 0	1,727 12 0			
Total	...	9,30,420 10 11	Total	...	9,30,420 10 11

I. C. BOSE,

Assistant Comptroller General (Forests).

FORM No. 63.

FOREST DEPARTMENT, ASSAM.—REVENUE RECEIVED AND OUTSTANDINGS ON ACCOUNT OF REVENUE DURING 1893-94.

Division.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realised during year.	Balance due to the Department at end of year.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Direction	Price of timber and other produce	...	1,262 0 0	1,262 0 0	1,262 0 0	...
Working Plans ...	„ „ ...	...	...	...	...	...
Cachar	„ „ ...	2,748 15 0	1,01,946 2 5	1,04,694 4 2	1,03,226 7 2*	1,468 10 3
Sylhet	„ „ ...	...	57,937 7 11	57,937 7 11	57,937 7 11	...
Goalpara	„ „ ...	15,358 0 0	38,064 10 4	53,422 10 4	50,287 10 4	3,135 0 0
Kamrup	„ „ ...	14,674 8 0	74,085 6 0	88,759 14 0	68,148 14 0	20,611 0 0
Darrang	„ „ ...	380 0 0	30,643 11 3	31,023 11 3	27,774 11 3	3,249 0 0
Nowgong	„ „ ...	1,489 15 6	34,834 14 6	36,324 14 0	36,298 6 0	26 8 0
Sibsagar	„ „ ...	550 0 0	19,289 15 4	19,839 15 4	19,289 15 4	550 0 0
Lakhimpur	„ „ ...	895 15 0	97,064 8 2	97,960 7 2	90,853 7 2	7,127 0 0
Naga Hills	„ „ ...	...	...	...	...	
Khasi and Jaintia Hills	„ „ ...	...	1,325 0 0	1,325 0 0	1,325 0 0	
Garo Hills	„ „ ...	5,180 8 3	39,066 7 2	44,246 15 5	37,342 5 2	6,904 10 3
Total	... ...	41,277 13 9	4,95,520 3 1	5,36,797 3 7	4,93,726 4 4†	43,071 12 6

* Of this, Rs 915-3-3 has been written off.

† From this Rs. 915-3-3 is to be deducted on account of irrecoverable amount written off, and after deduction the total comes to Rs. 492,811-1-1, which is the total revenue of the year.

FORM No. 64.

FOREST DEPARTMENT, ASSAM.—OUTSTANDINGS AND LIABILITIES ON ACCOUNT OF CONTRACTORS AND DISBURSERS FOR 1893-94.

Division.	Department Debtor.			Department Creditor.			Balance Due	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To Departments (Outstandings.)	By Department (Liabilities).
1	2	3	4	5	6	7	8	9
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Direction ...	...	360 0 0	360 0 0	250 0 0	330 0 0	580 0 0	220 0 0	...
Cachar ...	...	14,544 9 10	14,544 9 10	1,114 2 6	13,977 13 3	15,091 15 9	547 5 11	...
Sylhet ...	...	17,513 2 2	17,513 2 2	2,456 1 7	16,479 5 1	18,935 6 8	1,422 4 6	...
Goalpara ...	...	33,796 11 8	33,796 11 8	2,858 12 2	32,277 8 8	35,136 4 10	1,339 9 2	...
Kamrup ...	5 0 0	23,083 14 11	23,088 14 11	2,540 12 3	21,781 0 6	24,321 12 9	1,237 13 10	5 0
Darrang ...	...	18,023 9 3	18,023 9 3	1,628 6 7	16,619 6 0	18,247 12 7	224 3 4	...
Nowgong ...	...	7,105 5 8	7,105 5 8	294 1 6	7,068 12 9	7,362 14 3	257 8 7	...
Sibsagar ...	...	13,378 15 10	13,378 15 10	298 14 3	13,715 10 9	14,014 9 0	635 9 2	...
Lakhimpur ...	...	24,792 14 11	24,792 14 11	424 1 10	25,068 5 9	25,492 7 7	699 8 8	..
Naga Hills ...	...	...	...	...	...	...	...	...
Khasi and Jaintia Hills ...	...	...	...	...	...	...	...	...
Garo Hills ...	...	21,014 2 1	21,014 2 1	1,874 5 3	20,813 2 11	22,687 8 2	1,673 6 1	...
Total	5 0 0	1,73,613 6 4	1,73,618 6 4	13,239 9 11	1,68,131 1 8	1,81,870 11 7	8,257 5 3	5 0

I. C. BOSE

Assistant Comptroller General (Forests)

FORM No. 65.

FOREST DEPARTMENT, ASSAM.—FINANCIAL RESULTS OF THE YEAR 1893-94

Division.	Timber and other produce removed from the forests by Government Agency.		Other Revenue.		Formation, protection, and improvement of Forests.	Total.	
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.
	Rs	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Direction	.....	.....	1,262	16,284	16,688	1,262	32,972
Working Plans	.....	.....	.....	165	223	.....	388
Cachar	11,542	44	90,769	15,406	4,879	1,02,311	20,329
Sylhet	1,292	1	56,645	6,245	7,114	57,937	13,360
Goalpara	17,503	4,856	32,785	13,083	27,074	50,288	45,013
Kamrup	1,024	79	67,125	16,472	18,148	68,149	34,699
Darrang	111	.....	27,664	11,028	22,315	27,775	33,343
Nowgong	188	10	36,111	8,600	7,860	36,299	11,470
Sibsagar	628	1,906	18,662	3,243	6,721	19,290	11,870
Lakhimpur	60	.....	90,773	15,652	13,622	90,833	29,274
Naga Hills	.....	.....	.....	.....	.....	.....	.....
Khasi and Jaintia Hills ..	.....	.....	1,325	637	2,210	1,325	2,847
Garo Hills ..	96	149	37,246	15,236	14,471	37,342	29,856
Total	32,444	7,045	4,60,367	1,17,051	1,41,325	4,92,811	2,65,421

A. SMYTHIES,

Offg. Conservator of Forests, Assam.

Appendix I.

Register of Reserved Forests in the Province of Assam during the year 1893-94.

Date of entry.	Name of reserve.	Civil district and sub-division of district.	No. and date of notification sanctioning the reserve.	Area, in acres.	Boundaries.	Statement of rights.	Remarks.
15th June 1894 ...	Third addition to the Bijni reserve.	District Goalpara, Bijni Duar.	No. 2614R., dated the 15th June 1894.	25,530	*West.*—The Buriai river from boundary mound No. 1 near boundary mound No 68 on the Bhutan boundary, to boundary mound No. 2; thence a demarcated line from the latter mound on the Buriai river running south-east to boundary mound No. 3, and then east to boundary mound No. 4 on the Sukan Thakulai; thence along the right bank of this stream to boundary mound No. 5; and thence a demarcated line running south with a slight westerly tendency to boundary mound No. 6 on the Napthang Jhora and along the right bank of this stream to boundary mound No. 7. *South.*—A demarcated line from boundary mound No. 7, running east to boundary mound No. 8 (the same as No. 1 of the Bijni reserve) on the Kanamakra river. *East.*—The left bank of the Kanamakra river from boundary mound No. 8 (the same as No. 1 of the existing Bijni reserve) to boundary mound No. 9 on the Bhutan boundary, west of Bhutan boundary pillar No. 72. *North.*—The Bhutan boundary from boundary mound No. 9 on the left bank of the Kanamakra river to boundary mound No. 1 on the right bank of the Buriai river, east of Bhutan boundary mound No. 68.		
2nd August 1893 ...	Addition to Guma reserve.	District Goalpara, Duar Guma.	No. 5926R., dated the 2nd August 1893.	608	*North.*—The left bank of the Chakma river from boundary pillar No. 39 to boundary pillar No. 40 and a demarcated line thence running westward to boundary pillar No. 42, near the source of the Bonnai river. *East.*—A demarcated line running north from boundary pillar No. 38 to boundary pillar 39 on the Chakma river. *South and West.*—The northern boundary of the existing reserve from boundary pillar No. 42 near the source of the Bonnai river to boundary pillar No. 38.		

Appendix I—*continued.*

Date of entry.	Name of reserve.	Civil district and sub-division of district.	No. and date of notification sanctioning the reserve.	Area, in acres.	Boundaries.	Statement of rights.	Remarks.
1st December 1893 ...	Addition to the Kulsi reserve.	District Kamrup, Pantan mauza.	No. 8926R., dated the 1st December 1893.	28	*North.*—By the boundary of the Kulsi reserve between mounds Nos. 31 and 34. *East.*—The Noa river between mounds Nos. 31 and 34. *South.*—The boundary of the reserve between mounds Nos. 33 and 34. *West.*—The boundary of the reserve between mounds Nos. 32 and 33.		
Ditto	Ditto ditto ...	Ditto ditto ...	Ditto ditto ...	280	*North.*—The present boundary of the Kulsi reserve from boundary mound No. 12 to mound No. 16 on the right bank of the Kulsi river; thence across the river to mound No 16*a* on the left of the same; and from thence a demarcated line travelling due west to boundary mound No. 16*b* on the left bank of the Mara Kulsi. *West and South.*—From boundary mound No. 16*b* up the Mara Kulsi river to its junction with the Jia Kulsi river, nearly opposite mound No. 9 of the present reserve; thence across the Jia Kulsi river to mound No. 9 of the present reserve, and thence to mound No. 11 of the present reserve. *East.*—The Bangar stream from mound No. 11 to mound No. 12 of the present reserve.		
2nd ditto... ...	Barduar reserve ...	District Kamrup, Barduar mauza.	No. 8942R., dated the 2nd December 1893.	247	(1) From boundary mound No. 29 the boundary to travel in a straight line to a point 132 feet west of boundary mound No. 6; thence round a Sâl-covered hill to a point 495 feet north-east of boundary mound No. 6; and thence in a straight line to boundary mound No. 8, enclosing an area of about 63 acres. (2) From boundary mound No. 8 the boundary to travel in a straight line to boundary mound No. 10, enclosing an area of about 5 acres. (3) From boundary mound No. 10 the boundary to travel in a straight line to boundary mound No. 12, enclosing an area of about 8 acres. (4) From boundary mound No. 13 the boundary to travel in a straight line to boundary mound No. 17, enclosing an area of about 11 acres.		

						(5) From boundary mound No. 17 the boundary to travel in a straight line to a point 528 feet south of boundary mound No. 17 and 192 feet in a south-westerly direction to a point 759 feet south-east of boundary mound No. 21 at the foot of a small Sâl-covered hill; thence round the foot of the south face of the hill to a point 198 feet east-south-east of boundary mound No. 22; and thence in a straight line to boundary mound No. 24, enclosing an area of about 34 acres. (6) From boundary mound No. 24 the boundary to travel in a straight line to boundary mound No. 26, enclosing an area of about 28 acres. (7) From boundary mound No. 26 the boundary to travel in a straight line to boundary mound No. 33, enclosing an area of about 25 acres. (8) From boundary mound No. 34 the boundary to travel in a straight line along the Chhayagaon-Chanchalpara road to boundary mound No. 1, enclosing an area of about 73 acres.
19th March 1894	...	Mugakhal	District Kamrup, Bokokharija mauza.	No. 1192R., dated the 19th March 1894.	284	*North and West.*—From the point of intersection of the Panikati Jan with the Gauhati-Goalpara Trunk Road (boundary mound No. 8) going north-west to boundary mound No. 7, as shown in the map, and thence in a straight line to boundary mound No. 6, from which point it follows the boundary of the old protected Mugakhal block to boundary mound No. 14 on the Debria river. *South and East.*—From boundary mound No. 14 to boundary mound No. 11 of the old Mugakhal block; thence a demarcated line to boundary mound No. 9 on the Gauhati-Goalpara Trunk Road, as shown on the map, and thence along this road to the place at which it crosses the Panikati Jan, at boundary mound No. 8.
Ditto.	...	Jharikhuri	District Kamrup, Luki mauza.	Ditto, ditto ...	1,978	*West and North.*—From boundary mound No. 1 on the old boundary of the Jharikhuri protected block to boundary mound No. 19 of the same as shown on the map; thence a demarcated line running in a north-easterly direction to boundary mound No. 21; thence a demarcated line going south-east to boundary mound No 22; and thence a demarcated line following the old boundary of the Buragohain protected block to boundary mound No. 24.

Appendix I—*concluded.*

Date of entry.	Name of reserve.	Civil district and sub-division of district.	No. and date of notification sanctioning the reserve.	Area, in acres.	Boundaries.	Statement of rights.	Remarks.
					East and South.—A demarcated line from boundary mound No 24 to boundary mound No. 36, following the old eastern boundary of the Buragohain protected block; thence a demarcated line travelling in a south-westerly direction to boundary mound No. 39 (old boundary mound No. 29 of the Jharikhuri protected block); thence a demarcated line following the old boundary of the protected forest in a southerly direction to boundary mound No. 47; and thence a demarcated line also following the old boundary of the protected Jharikhuri forest to boundary mound No. 1.		
22nd March 1894. ...	Second addition to the Milmilia reserve.	District Kamrup, Chhaygaon mauza.	No. 1231R., dated the 22nd March 1894.	444	*East and North.*—From boundary mound No. 57 in a north-westerly direction along the foot of the Gobordhan hill to boundary mound No. 50 on the Trunk Road; thence along the Trunk Road to boundary mound No. 48, where the roads crosses the Salmara river; and thence following the Salmara river to boundary mound No. 57 of the Milmilia reserve. *West.*—From boundary mound No. 57, following the boundary of the Milmillia reserve to mound No. 59. *South.*—From boundary mound No. 59 of the Milmillia reserve along the boundary of the said reserve to mound No. 66 on the Salmara river; thence along the Salmara river to boundary mound No 59, as shown on the map, at the foot of the Gobordhan hill; and thence along the foot of the said hill to boundary mound No. 57.		
Ditto ...	Third addition to the Milmillia reserve.	Ditto ...	Ditto ...	276	*North and West.*—From boundary mound No. 40 of the Milmillia reserve to boundary mound No. 47 of the same reserve on the Trunk Road; thence following the Trunk Road to boundary mound No. 24 of the said reserve. *South.*—From boundary mound No. 24 of the Milmillia reserve to boundary mound No. 33 of the said reserve on the Kharkhari river. *East.*—From boundary mound No. 33 on the Kharkhari river, following the Milmillia reserve boundary, to mound No. 40 of the said reserve.		
Ditto ...	Fourth addition to the Milmillia reserve.	Ditto ...	Ditto	184	*North.*—From boundary mound No. 37 on the Trunk Road, as shown on the map, following the road in a north-easterly direction, to boundary mound No. 23 of the Milmillia reserve.		

						East—From boundary mound No. 23 of the Milmillia reserve, following the boundary of the said reserve in a south-easterly direction to boundary mound No 12 *South*.—From boundary mound No 12 of the Milmillia reserve along the foot of the hills to boundary mound No. 39 of the Chhaygaon reserve, and thence in a south-westerly direction to boundary mound No 36 on the Nakkati river, as shown in the map *West*—From boundary mound No 36 on the Nakkati river along the said river to boundary mound No 37, where the Trunk Road crosses the river.
16th April 1894	...	Addition to Jaipur reserve	District Kamrup, Luki mauza.	No. 1570R, dated the 16th April 1894.	50	*North and West*—From boundary mound No 3 of the Jaipur reserve, going north along the edge of the Juli river up to the pathway leading to the Nampathar village, to boundary mound No. 128. *East and South*—From boundary mound No. 128 on the above pathway, along the outer edge of the Sâl forest and cultivation of the Upper Hora village, to boundary mound No 3 of the Jaipur reserve as shown on the map
Ditto	...	Addition to Gizang reserve	Ditto ...	Ditto ...	3,840	*North*—From boundary mound No 39, as shown on the map, at the foot of the Pani hills, along the foot of these hills, including the Sal forest, to boundary mound No. 57, as shown on the map, on the left bank of the Singra river. *East*—From the above boundary mound No. 57, along the foot of the Pani hills, including the Sal forest, to boundary mound No 26 of the Gizang reserve, and thence along the boundary of the above reserve to boundary mound No 12 of the same *South*—From mound No. 12 of the Gizang reserve along the foot of the hills up to the Gizang river, and along the left bank of this latter to the footpath leading from Gizang to Jaipur, from this point the above footpath over the hills becomes the boundary up to boundary mound No. 34 of the Jaipur reserve. *West*—From boundary mound No 34 of the Jaipur reserve to boundary mound No 23 of the same, thence along the foot of the Pani hill range, including the Sal forest, to boundary mound No. 28 of the Barodobha reserve, thence along the foot of the Pani range, including the Sal forest, to boundary mound No 39 on the northern border.

Appendix II.

KÚLSI PLANTATION MEMORANDUM.

ntings and Measurement of Trees of the different Species, details of Expenditure incurred, and Table showing the Rainfall in 1893-94.

RUBBER PLANTATION.

EASTERN BLOCK, 1873 TO 1877.

Area 88 *acres.*

Number of dominant trees measured.	Average height. Ft	Average girth. Ft	In.
100	57	5	9

The measurements of the largest and finest are—

Number.	Height. Ft.	Girth Ft	In.
1	68	7	6
2	70	10	4
3	69	11	6
4	72	6	4
5	70	9	0
6	68	5	8
7	69	9	0
8	68	5	0
9	71	7	0
10	69	6	10

The block was divided into four compartments. The result of countings in each was as follows:

No. of Compartment.				Number alive	Number of vacancies	Total.
1	...	...	...	396	13	409
2	...	...	...	733	10	743
3.	...	...	...	838	7	845
4	...	...	...	444	10	454
Total	...	...	...	2,411	40	2,451

Fifty of the Poma (*Credrela toona*) trees in this plantation were also measured, and the average size of them is given below

Number of dominant trees measured.	Average height. Ft	In	Average girth. Ft.	In
50	56	1¾	1	8½

The measurements of the ten largest and finest are—

Number	Height Ft.	Girth Ft	In
1	58	2	8
2	57	2	1
3	57	3	3
4	66	2	6½
5	62	2	2
6	50	1	1½
7	56	2	1½
8	54	2	7
9	53	2	4½
10	48	2	1

These trees were sown in 1878. There are 226 planted bamboo clumps in this block. Expenditure was Rs. 7-15-0.

Appendix II—*continued.*

WESTERN BLOCK.

COMPARTMENT, 1878.

Area, 13 *acres.*

Number of dominant trees measured.	Average height. Ft.	Average girth. Ft.	Average girth. In.
50	70	8	7½

The following are amongst the finest and largest trees:

Number.	Height. Ft.	Girth. Ft.	Girth. In.
1	73	11	1
2	72	10	8
3	72	13	2
4	70	7	3
5	83	8	5
6	66	9	11
7	65	9	1
8	68	8	10
9	64	10	5
10	67	13	7

In this compartment there are 130 bamboo clumps.
Expenditure was Re. 1-3-0.

COMPARTMENT, 1883.

Area, 25·45 *acres.*

Number of dominant trees measured.	Average height. Ft.	Average height. In.	Average girth. Ft.	Average girth. In.
50	52	4¾	7	8

The ten largest and finest measured as follows:

Number.	Height. Ft.	Girth Ft.	Girth In
1	55	5	2
2	59	7	8
3	55	5	0
4	58	4	2
5	57	5	6
6	56	5	0
7	50	4	11
8	49	5	10
9	47	7	2½
10	38	5	0

Number alive.	Number of vacancies.	Total.
1,131	35	1,166

There are 380 bamboo clumps in the compartment, and 3 Ceara rubber trees of an average height of 38 feet and girth of 1 foot 8 inches.

Expenditure was Rs. 2-5-5.

COMPARTMENT, 1884.

Area, 33·40 *acres.*

Number of dominant trees measured.	Average height. Ft.	Average height. In.	Average girth. Ft.	Average girth. In.
50	42	3½	3	5½

Appendix II—*continued.*

The measurements noted below are those of the finest in this compartment, *viz.*—

Number.	Height. Ft.	Girth. Ft.	Girth. In.
1	43	4	4
2	38	4	3
3	48	3	0
4	40	2	6
5	47	3	2½
6	44	4	11½
7	45	4	2
8	43	3	0
9	38	3	5½
10	37	3	5

Number alive.	Number of vacancies.	Total.
1,824	59	1,883

There are 11 Ajhar seed beds with an average length of 290 feet and width of 4 feet. These plants are averaging 28 feet in height and 7¾ inches in girth.

Expenditure was Rs. 2-15-7.

TEAK PLANTATION.

COMPARTMENT, 1872.

Area, 8·75 *acres.*

Number of dominant trees measured.	Average girth. Ft.	Average girth. In.
50	3	11½

The following are amongst the finest and largest trees :

Number.	Height. Ft.	Girth. Ft.	Girth. In.
1	73	4	2
2	81	2	11
3	81	3	7
4	83	3	4
5	87	3	3
6	87	4	2
7	79	3	7
8	80	5	3
9	80	4	6½
10	80	3	10½

In this compartment there are 80 *Pithecolobium Saman* trees of an average height of and girth of 2 feet 4 inches.

Expenditure was Re. 1-8-0.

COMPARTMENT, 1873.

Area, 33 *acres.*

Number of dominant trees measured.	Average girth. Ft.	Average girth. In.
50	2	10½

The following are amongst the largest and finest:

Number.	Height. Ft.	Girth. Ft.	Girth. In.
1	86	3	8
2	75	2	11½
3	86	3	0
4	78	2	9½
5	76	2	11½
6	80	2	9
7	74	3	0
8	80	2	11½
9	80	2	11
10	81	2	10½

There are also a number of *Pithecolobium Saman* trees in this compartment of an average height of 51½ feet and girth of 2 feet 4 inches.

Appendix II—*continued.*

COMPARTMENT, 1874.

Area, 17·68 *acres.*

Number of dominant trees measured.	Average girth. Ft.	Average girth. In.
50	3	7

The following are amongst the best :

Number.	Height. Ft.	Girth. Ft.	Girth. In.
1	76	4	6
2	80	3	10
3	83	3	7
4	78	3	6½
5	81	4	4
6	90	4	8½
7	87	4	2
8	84	4	2½
9	86	4	3½
10	88	5	0

There are two clumps of *Musa Textilis* in this compartment.

COMPARTMENT, 1875.

Area, 60·6 *acres.*

Number of dominant trees measured.	Average height. Ft.	Average height. In.	Average girth. Ft.	Average girth. In.
50	87	4½	3	0

The following are the finest and largest :

Number.	Height. Ft.	Girth. Ft.	Girth. In.
1	81	4	2
2	92	4	5½
3	88	4	7
4	86	5	9
5	93	4	2
6	99	4	2
7	92	4	4½
8	88	4	2
9	79	3	11
10	79	5	6½

There are several Sam, Ajhar, and Nahor plants in this compartment.

COMPARTMENT, 1878.

Area, 20·90 *acres.*

Number of dominant trees measured.	Average height. Ft.	Average height. In.	Average girth. Ft.	Average girth. In.
50	77	9½	2	8½

The following ten trees measured are the best and largest :

Number.	Height. Ft.	Girth. Ft.	Girth. In.
1	79	3	2½
2	78	4	2
3	82	3	9
4	75	2	10½
5	85	3	1
6	77	2	7
7	74	3	2
8	74	2	9½
9	78	2	8
10	76	2	8¾

In this compartment there are several Ajhar and Amari plants.

Appendix II—*continued.*

COMPARTMENT, 1879.

Area, 10·0 *acres.*

Number of dominant trees measured.	Average height. Ft.	Average height. In.	Average girth. Ft.	Average girth. In.
50	64	1¼	1	10½

The following ten trees are the largest and best

Number.	Height. Ft.	Girth. Ft.	Girth. In.
1	60	2	1
2	65	2	5½
3	65	2	2½
4	64	2	6
5	68	2	7½
6	66	2	7½
7	63	2	4½
8	64	2	6
9	62	2	5½
10	63	2	4

Another fifty trees in this compartment gave the following measurements :

Number of dominant trees measured.	Height. Ft.	Height. In	Average girth. Ft.	Average girth. In.
50	53	9½	2	1½

The following measurements were taken of the finest :

Number.	Height. Ft.	Girth. Ft.	Girth. In.
1	66	2	11
2	72	3	0
3	50	2	11
4	44	1	6½
5	50	1	2½
6	50	1	7
7	55	1	8½
8	51	1	9
9	50	1	7½
10	50	1	3

There is only one Ceara Rubber tree left alive of 70½ feet in height and 1 foot 3 inches in girth.

COMPARTMENT, 1881

Area, 20 *acres.*

Number of dominant trees measured.	Average height. Ft.	Average height. In.	Average girth. Ft.	Average girth. In.
50	65	4¾	2	2½

The following are the best and largest in this compartment :

Number.	Height. Ft.	Girth. Ft.	Girth. In.
1	65	2	1½
2	67	2	7
3	63	2	2½
4	63	2	1½
5	67	2	7
6	67	2	5½
7	70	2	11½
8	62	2	10
9	65	2	9½
10	65	2	8

The following trees are also found in this compartment, *viz.*, 260 *Pithecolobium Saman* trees of an verage height of 59 feet 1 inch and girth of 3 feet 5 inches, which were planted along both sides of Hathigarh and Chanchalpara district road.

Appendix II—*continued.*

The Sisu trees in this plantation measured as follows

Number.	Height. Ft	Height. In.	Girth. Ft	Girth. In.
1, 2	.....		Dead.	
3	27	0	1	1
4	42	0	1	5
5	37	0	1	2
6	.....		Dead.	
7	33	0	1	4
8	.....		Dead.	
9	31	6	1	3
10	41	0	1	5½

The Ajhar trees were also measured, and gave the following results :

Number.	Height Ft.	Height In	Girth. Ft.	Girth. In.
1	39	0	1	7
2	37	6	1	2¼
3	39	0	1	4½
4	37	6	1	3½
5	39	0	1	6
6	34	0	1	5½
7	40	0	1	8¾
8	42	0	1	4
9	41	0	1	3¾
10	40	0	1	2

There are 76 Khair trees left alive; ten of these measured as follows

Number.	Height Ft	Girth Ft.	Girth In.
1	44	1	4
2	38	1	2
3	35	1	1
4	38	1	2½
5	41	1	3¼
6	57	2	1
7	50	2	2½
8	55	1	10
9	28	0	10
10	22	0	8

Besides these, there are some Sonaru (*Cassia Fistula*) and Sam (*Artocarpus Chaplasha*) trees.

Expenditure was Rs. 31-7-0.

SISU PLANTATION, 1873.

Area, 20 acres.

Number of dominant trees measured.	Average height Ft.	Average height In	Average girth Ft	Average girth In.
50	57	6	2	3¾

The following ten trees are the best

Number	Height. Ft.	Girth Ft	Girth In.
1	55	2	4½
2	58	2	7
3	62	2	9½
4	63	3	1
5	64	3	2½
6	57	2	7
7	57	2	10
8	54	3	1½
9	56	2	8
10	53	2	9

Fifty Poma trees in the plantation were also measured :

Number of dominant trees measured.	Average height Ft	Average height In	Average girth. Ft	Average girth. In.
50	61	9½	2	4

Appendix II—*continued.*

Amongst the best are the following.

Number.	Height. Ft.	Girth. Ft.	Girth. In.
1	65	4	1
2	46	4	2
3	65	3	5½
4	62	2	8
5	63	3	6
6	66	4	1½
7	65	3	2½
8	65	3	3
9	68	3	4
10	57	3	3½

In this compartment there are also 71 Ajhar seed beds, averaging 269 feet in length and 11 feet in width. The size of the best trees, 23 feet and 6 inches in height and 1 foot 9 inches girth.

Expenditure was Rs. 13-4-0.

BAMBOO PLANTATION.

Area, 2 acres.

The average number of bamboos in each clump is 99 and 58, respectively.

The total number of bamboos cut for departmental use is as follows:

Jati	900
Bejuli	250

CINCHONA PLANTATION.

1885.

COMPARTMENT NO. 1.

There are two Ceara Rubber trees, averaging 24 and 37 feet in height and 1 foot 7 inches and 1½ feet in girth.

Expenditure was Rs. *Nil.*

JUBILEE PLANTATION.

Area, 2 acres.

This is a small plot planted with different kinds of bamboos, canes, and Nahor trees. Sixteen Rubber creepers (received from Upper Assam) were also planted in this plot, and of these, 13 are left alive.

NURSERIES.

The following are the results of countings made in the different rubber nurseries, *viz.*—

Number.	Number of plants.
1	15
2	188
3	2,616
Total	2,819

MISCELLANEOUS.

Bungalow Hill.

The two Maipak trees now measure 73 and 73½ feet in height, and have girths of 3 feet 8 inches and 4 feet 3 inches, respectively.

There are also 11 *Pithecolobium Saman* trees of an average height of 55 feet 6 inches and girth of 4 feet 3 inches, and 4 Ceara Rubber trees, of which the best one is 56 feet in height and 2 feet 8 inches in girth. Of the *Castiloa Elastica* plants, only one is alive, and there are 12 *Landolphia*

There are 15 *Pithecolobium Saman* trees at Rajapara, averaging a height of 20 feet and girth of 2 feet.

There are 91 Rubber trees and 60 Bhaluka bamboos planted along the side of the district road.

Appendix II—*concluded.*

The expenditure was Rs. *Nil* from Local Board.
Along the new inspection-path 19 Rubber creepers were planted out, 17 of which are alive
Expenditure was Rs 91-5-9.
There are now 179 clumps of bamboos of the following species, *viz.*—

Jati	165
Joo	14
Total	179

The expenditure on plantation work at Kulsi during the year was—

1 Rubber—

	Rs	a.	p.
Old, or eastern block, 88 acres ... ... } New, or western block, 71 acres ... . }	14	7	0
2. Teak, 168 acres	1	8	0
3. Sisu	13	4	0
4 Khair	31	7	0
5. Cinchona	.....		
6. Miscellaneous	91	5	9
7. Establishment	239	13	9
Total	391	13	6

TABLE OF RAINFALL IN KULSI PLANTATION.

	1892-93.	1893-94
April	7.65	6·90
May	16·78	6·10
June	8 50	7·10
July	10 66	20·50
August	11 50	6·82
September	6·50	13·31
October	*Nil*	0·30
November	...	0·30
December	0·70	...
January	0·40	...
February	1·80	1·16
March	1·90	0·12
Total	66·39	62 61

H. S. K. EDIE,
Assistant Conservator of Forests,
Kamrup Division.

Appendix III.

CHARDUAR CAOUTCHOUC PLANTATION MEMORANDUM.

Height and girth of fifty Rubber trees measured in each year's Plantation since 1874-75.

	1891-92				1892-93.				1893-94.			
	Average height.		Average girth.		Average height.		Average girth.		Average height.		Average girth.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
CHARDUAR												
1874-75	67	11	13	10	71	1	13	11	74	9	15	9
1875-76	65	10	10	0	68	11	10	1	73	1	11	1
1876-77	64	11	9	2	67	8	9	3	71	8	11	0
1877-78	61	9	7	10	64	1	7	11	68	10	8	2
1878-79	53	3	7	0	55	5	7	2	59	9	8	0
1879-80	53	1	6	8	54	2	6	9	60	9	7	7
1880-81	47	10	5	6	50	2	5	7	55	9	6	3
BAMANI HILL.												
1874-75	60	9	14	2	62	11	14	4	69	8	15	7

Appendix III—*continued.*

Condition of Nurseries at the end of 1893-94.

Compartment No.	Area, in acres.	Number of seedlings.	Height.		
			Greatest.	Average.	Least.
Old nursery, Compartment No. 2 ...	5·34	2,750	57′ 2″	23′ 0″	3′ 3″
New " " " 2 ...	0·42	1,242	42′ 6″	16′ 0″	5′ 6″
Old " " " 3 ...	4·08	9,800	59′ 6″	22′ 0″	5′ 10″
New " " " 3 ...	0·39	2,626	41′ 6″	18′ 0″	2′ 7″
Nursury in Compartment " 9 ...	4·13	10,680	57′ 2″	21′ 0″	7′ 6″
" " " 10 ...	9·36	13,440	58′ 4″	18′ 0″	2′ 10″
New nursery (1892-93)	1·32	809	4′ 0″	1′ 5″	0′ 2″
Total	25·04	41,347	.....	.....	.....

Details of Expenditure on Charduar Caoutchouc Plantation during 1893-94 *compared with the two previous years.*

Particulars.	1891-92.			1892-93.			1893-94.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
1. Establishment	69	5	0	.....			7	0	0
2 Plantation fence (including guards for nurseries)	705	5	4	1,144	0	0	1,365	2	0
3. Clearing old compartment lines, removing trees and stumps, repairing mounds, renewing stakes, and levelling paths ...	1,570	4	4	3,486	11	6	2,881	10	0
4. Nurseries, fencing, weeding, drainage, &c....	75	12	0	872	13	0	92	12	0
5. Planting out Rubber trees A B 9565, C 865	A 150	0	0	B 910	14	0	C 245	3	0
6. Miscellaneous	51	10	6	.....			201	11	10
7. Cost of Compartment No. 12 ...	200	11	0	331	12	0	65	8	0
8. Repairing plantation buildings ...	60	0	0	1,778	4	0	54	8	0
9. Cost of Compartment No. 15	116	14	0	615	6	0	212	12	0
10. Expenditure on plantation road ...	181	1	0	575	2	0	49	2	0
11. Cost of Compartment No. 16	863	13	0	1,180	6	0	594	12	0
12. " " No. 17	563	0	0	1,513	6	0	144	10	0
13. New lines for extending plantation ...	290	1	0	3,584	5	6	897	10	0
14. Replanting Rubber trees in new extension (3083)	.....			31	7	0	861	9	6
Total	4,897	13	2	15,974	7	0	7,673	14	4

Rainfall at the Charduar Caoutchouc Plantation for the year 1893-94 *compared with the last two years.*

	Rainfall.		
	1891-92.	1892-93.	1893-94.
April	4·46	6·45	.....
May	9·80	23·08	.....
June	18·36	24·09	.....
July	14·12	14·39	15·18
August	7·38	28·20	17·72
September	7·11	10·00	9·52
October	.....	2·50	14·76
November	.....	0·12	.....
December	.....	0·87	.....
January	0·07	0·56	.....
February	1·03	0·28	2·46
March	3·53	1·79	1·33
April	.....	9·25	5·15
May	.....	6·50	18·36
June	.....	9·27	18·43
Total	65·86	137·35	102·91

D. P. COPELAND,

Deputy Conservator of Forests, Darrang Division.

Appendix IV

Statement of Forest Produce granted free during 1893-94.

Description of forest produce.	Cachar Division.		Sylhet Division.		Goalpara Division.		Kamrup Division.		Darrang Division.		Nowgong Division.		Sibsagar Division.		Lakhimpur Division.		Khasi and Jaintia Hills Division.		Garo Hills Division.		Total.	
	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.	Quantity in cubic feet.	Value.
(a) To right-holders.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.
I. Timber ... } *Gurkati* permits II. Firewood ... } *Gurkati* permits III. Minor forest produce } *Gurkati* permits	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..	...	15	30	...	30
Total	.....	.....	.....	.....	.....	.	.....	...	...	..	.....	.....	.....	.		..	...	...	...	30	..	30
(b) Under concessions granted by the Local Government.																						
I. Timber	7,912	247	132,560	1,134	16,320	1,632	15,440	1,544	122,074	12,868	3,900	390	190,080	16,232	52,730	5,196	..	...	100	8	...	39,251
I(*a*). Bamboos (number)	61,300	153	1,696,490	4,077	.....	.....	38,700	387	18,880	258	55,232	153	41,014	410	7,625	119	...	...	...	...	...	5,557
II. Firewood	66,400	1,037	1,223,394	19,116	66,000	516	73,500	1,148	205,088	3,204	15,300	863	267,218	4,175	5,600	14	..	...	...	...	...	30,073
III. Minor forest produce	.....	329	.....	3,743	1,090	8	18	.....	8,963	67	665	5	.....	96	.....	12	.	...	...	...	..	4,260
IV. Grass, grazing, and leaf fodder ...	.....	.....	.....	...	...	....	....	.....	....	...	.....	..	.....	.....	.....	...	..	..	..	...	...	.....
V. Branches, leaves, and vegetable mould for manuring purposes	..	.....	.....	.....	...	...	.....	.....	...	...	....	....	...	...	.....	..		..			.	.....
Total	...	1,766	.....	28,070	.....	2,156	....	3,079	....	16,397	.....	1,411	....	20,913	.....	5,341	.		.	8	...	79,141
(c) By free grants under executive orders.																						
I. Timber	.....	.....	.....	.....	48,890	1,222	1,770	44	. .	.....	2,080	208	.....		....	...	...	...	240	120	...	1,594
I(*a*). Bamboos (number)	.....	.....	.....	.....	2,385	32	43,870	439	...	.....	500	5	.....	.	.....	...	...	...	1,500	12	...	488
II. Firewood	.....	.....	.....	.....	133,252	1,041	.....	1,851	.....	.....	2,816	44	.....	...	...	...	...	...	...	...	...	2,936
III. { Minor forest produce	.....	.....	.....	.....	1,258	9	3,940	30	.....	.....	.	.....	.....	..	....	...	..	..	...	...	...	3
{ *Gurkati* permits	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...		.....	..	..	...	2	4	..	4
IV. Grass, grazing, and leaf fodder ...	.. ...	.....	.....	.....	110	55	.....	.....	.....	... ..	.....	... .	... .	..	....	..	57	14	20	5	...	74
V. Branches, leaves, and vegetable mould for manuring purposes ...	.. . .	.....	.....	.....	.....	.. . .	....	. ....	.....	..	.....	.....	. ....	.		..	..	.	.	..	...	.... .
Total	.....	.....	.....	... ..	.....	2,359	.	2,364	.....	....	.....	257	. . ..	.....	...	.	. .	14		141	.	5,135
Grand total	.....	1,766	.....	28,070	.....	4,515	.....	5,443	.....	16,397	.....	1,668	. ...	20,913		5,341	...	14	...	179	...	84,306

Appendix V.

Imports of Forest Produce from Foreign Territory during 1893-94 *as compared with* 1892-93.

—	1892-93.												1893-94.											
	Description of timber or other produce.												Description of timber or other produce.											
	Logs.		Boats or dugouts.		Poles.		Fuel.		Bamboos.	Canes.	Thatching grass.	Rubber.	Logs.		Boats or dugouts.		Poles.		Fuel.		Bamboos.	Canes.	Thatching grass.	Rubber.
	No.	C. ft.	No.	C. ft.	No.	C. ft.	No.	C. ft.	No.	Bundles.	C. ft.	Mds.	No.	C. ft.	No.	C. ft.	No.	C. ft.	No.	C. ft.	No.	Bundles.	C. ft.	Mds.
From beyond Inner Line of Lakhimpur ...	.....	...	146	...	...	...	...	...	.....	.....	.....	.....	.....	.....	272	...	...	...	...	...	.....	.....	.....	....
„ Manipur and Lushai country ...	.....	48,483	...	..	...	...	...	..	.....	.....	...	141	1	49	...	...	...		...		11,300	259	.....	110
„ Hill Tipperah ...	13,974	360,557	...	...	...	...	...	...	5,481,847	28,390	211,170	.....	12,683	265,221	...	...	...	...	196	386	3,745,028	205,794	683,919	.....
„ Bhutan and Towang	299	.....	79	...	...	...	...	...	.....	.....	.....	115	136	.....	208	...	...	..	...	...	.....	.....	.....	100
„ Dafla Hills	.....	.....	...	...	..	...	...	...	.....	.....	.....	845	.....	.....	...	...	..	...	...		.....	.....	.....	972
„ Naga, Mishmi, and Singpho Hills .	.....	.....	...	...	.	...	...	...	.....	.....	.....	1,912		..	...	.	.	.		..	.....	.....	.....	1,555

Imports and Exports of Forest Produce by river during 1893-94 *as furnished by the Director of Land Records and Agriculture.*

Name of forest produce.	Denomination.	Registered at Dhubri.				Registered at Bhairab Bazar.			
		Imports.		Exports.		Imports.		Exports.	
		By boat.	By steamer.	By boat.	By steamer.	By boat.	By steamer.	By boat.	By steamer.
Timber ...	Number ...	.....	1,770	332,213	15,309	1,237	3,247	3,273	384
Caoutchouc ...	Maunds ...	.....	.....	.....	3,345	.....	.....	.....	96
Lac — Stick	„ ...	.....	.....	1,607	4,122	.....	.....	40	106
Lac — Shell	„ ...	.....	.....	.....	.....	10	.....	.....	.....
Lac — Dye	„ ...	.....	.....	.....	.....	.....	.....	.....	.....
Bamboos ..	Number ...	.....	.....	4,288	.....	.....	.....	4,522,820	50
Canes ...	Maunds ...	.....	.....	16,625	27	.....	.....	6,813	.....
Other Minor Forest Produce ...	Cubic feet ...	.....	.....	1,496,194	.....	.....	.....	.....	.....

Appendix VI.

Statement showing Outturn of Timber and Fuel from Government, Foreign, and Private Forests in the Surma Valley Districts.

Classes of Forests.	1892-93.		1893-94.		Increase.		Decrease.	
	Timber.	Fuel.	Timber.	Fuel.	Timber.	Fuel.	Timber.	Fuel.
CACHAR.								
From Government Forests ...	648,436	129,906	886,638	197,118	238,202	67,212	.....	.....
„ Foreign „ ...	48,483	.....	49	.....	.....	.....	48,394	.....
„ Private „ ...	166,412	13,718	96,971	73,696	69,441	.....	.....	59,978
SYLHET.								
From Government Forests ...	131,638	1,395,354	411,006	1,327,252	279,368	.....	.....	68,102
„ Foreign „ ...	360,587	.....	265,221	386	.....	386	95,366	.....
„ Private „ ...	42,527	13,604	7,765	21,030	.....	7,426	34,762	.....

Resolution on the Assam Forest Report for 1893-94.

Extract from the Proceedings of the Chief Commissioner of Assam in the General Department, No. 230R., dated the 23rd January 1895.

Read—

The Report on Forest Administration in Assam for the year 1893-94.

RESOLUTION.

Mr. J. McKee, Officiating Conservator of Forests, was in charge of the Forest Department in Assam during the year up to the 1st April 1894, except for a period of about five weeks, during which he was on privilege leave. Mr. A. Smythies, Officiating Conservator, took over charge on the 2nd April, and continued in charge to the end of the year. This Report was prepared and submitted by Mr. Smythies, but it describes chiefly the work done during the administration of his predecessor. The acknowledgments of the Chief Commissioner are due to Mr. McKee for the efficient supervision exercised by him over the Department, as well as for the sound advice which the Chief Commissioner has from time to time received from him on matters relating to Forest administration.

Chapter I.—Extension and constitution of State forests.

2. The total Forest area, as it stood at the close of the Forest year ending 30th June 1894, was 10,702·74 square miles as compared with 10,765·73 square miles at the close of the previous year. Of this area, 3,683 square miles represent reserved and 7,019·74 square miles unclassed forests; 57·52 square miles were added to the reserved area during the year, and 120·51 square miles excluded from unclassed forests. An area of 977 square miles of proposed reserves was still under settlement at the end of the year; but this includes the two proposed reserves of Kopili Dayang and Gunjong in the North Cachar hills, aggregating 508 square miles, large portions of which the Chief Commissioner, from what he has himself seen on tour in these hills, believes to be suitable for cultivation, and especially for tea cultivation, and which will therefore not be reserved without further consideration. Excluding these forests and the Panidihingia forest in the Sibsagar district, covering an area of 30 square miles, which has now been declared a reserved forest, and an area of about 6 square miles added to the Khalingduar reserve in the Darrang district since the close of the year, there now remains a total area of 433 square miles only still under settlement. The greater part of this is in the Nowgong district, in which it is proposed to reserve areas aggregating 386 square miles. Mr. Smythies reports that no progress whatever has been made in the district owing to the absence of a properly qualified officer, but that efforts will be made to push on the settlement as soon as it is possible to appoint a gazetted Forest Officer to the division. The Chief Commissioner hopes that the special attention of the present Conservator will be directed to the necessity of bringing the settlement operations to completion as soon as possible.

3. The Imperial Forest Survey closed their work in connection with the Goalpara forests towards the end of 1892-93; and the areas as calculated in this survey have been utilised in the present report and in the working-plan for the Goalpara *sál* forests

In addition to purely forest work, the Assam-Bhutan boundary was surveyed at a cost of Rs. 7,567. The Chief Commissioner has decided that, as this work was partly of a political nature, one-half of the cost only shall be debited to the Forest Department, the other half being paid from the general revenues of the Province.

Chapter II.—Management of State forests.

4. The preparation of the working-plan of the Goalpara *sâl* forests was taken in hand during the year, and has been completed since its close. Certain modifications were made on the visit of the Inspector General of Forests to Assam in November 1893, which necessitated the rewriting of the report; and owing to the absence on sick leave of the officer in charge, the report could not be completed till after the close of the year.

5. The Chief Commissioner observes that sufficient attention was, on the whole, paid during the year to the extension and maintenance of communications and buildings required for the Department. The arrangement under which the Darrang Divisional Officer resides 16 miles away from district headquarters is, however, very unsatisfactory, and no time should be lost in finding a suitable building site in Tezpur itself.

6. The number of offences against the Forest Act and Rules taken cognizance of by the Courts was 104 (affecting 277 persons) as compared with 128 cases (353 persons) in 1892-93,* and 171 cases in 1891-92; 101 cases were disposed of, and the percentage of convictions obtained was 75. The number of cases compounded under section 62 of the Forest Regulation increased from 260 in 1891-92 and 374 (involving 523 persons) in 1892-93 to 643 (involving 763 persons) during the year under review. This increase occurred almost entirely in the Sylhet, Sibsagar, and Garo Hills Divisions, and it is explained to be the result partly of stricter supervision and better detection of petty offences, and partly of the method of showing cases in the register of Forest offences. It appears that in cases compounded, each delinquent is frequently shown as a separate case, though many of them may have been concerned together in the commission of the same offence. There is no reason why this method should be followed, as the return (Form No. 52) contains separate columns for showing "Cases" and "Persons." Of the total number of cases compounded, 577, or 90 per cent., related to the illicit removal of forest produce. Form No. 52 shows that two cases of injury by fire were compounded. In reviewing the Report for 1892-93, the Chief Commissioner and the Government of India pointed out that such cases should not be compounded otherwise than under exceptional circumstances which render it inexpedient to prosecute the offender. It is presumed that there were some such circumstances in these two cases, though they do not appear to be stated in the Report.

* The period covered by the Report for 1892-93 was fifteen months from 1st April 1892 to 30th June 1893.

7. The total forest area over which protection from fire was attempted was 738,120 acres, of which 38,016 acres were burnt; but 22,456 acres of this were in the Bijni reserve in the Goalpara Division, which is conterminous with the Bhutan frontier and is much exposed to fire. The percentage of area successfully protected was 94·85, as compared with 99·4 in 1892-93. The cost of protection amounted to Rs. 10,991, or Rs. 10-0-9 per square mile, as compared with Rs. 15,315, or Rs. 13-12-2 per square mile, in the previous year. Although the measures of protection were not so successful as in the year immediately preceding, the Chief Commissioner recognizes that the season of 1893-94 was in many respects unfavourable, while that of 1892-93 was exceptionally favourable, to the prevention of fires. The results as compared with those of the two years 1890-92 are not unsatisfactory.

8. In paragraph 3 of the Resolution reviewing the Report for 1892-93 reference was made to the revised and consolidated rules under the Assam Forest Regulation of 1891, prepared by the late Conservator, which the Chief Commissioner had then under his consideration. The opinions of District Officers were procured on the draft,

and, in communication with the Conservator, the Chief Commissioner has entirely recast and re-arranged the rules. The new rules will be published as soon as the orders of the Government of India have been received sanctioning the proposed rules under section 37 of the Regulation, which require the previous sanction of the Governor General in Council. In recasting the rules, Mr. Ward has anticipated the recent Resolution of the Government of India on the subject of Forest administration (Revenue and Agricultural Department Circular No. 22F., dated the 19th October 1894), and has made it clear that the control which the Forest Department exercises over unclassed State forests must not be allowed to interfere with the extension of cultivation, to which in a province like Assam it is obviously desirable to give all possible encouragement. Hitherto the Forest rules in force in Assam relating to unclassed forests have been far from clear, and, as Mr. Ward has ascertained in his cold-weather tours, they have, in some instances, been locally worked more with a view to increase the receipts of the Department than in the interests of the cultivator. The result is that the extension of ordinary cultivation has, to some extent, been retarded. The Chief Commissioner is also inclined to think that there is a tendency on the part of the Department to constitute reserved forests without sufficient enquiry being made into the value of the forests which it is proposed to bring under reservation, while, not unfrequently, in order to secure a good natural boundary, large areas are proposed for reservation which contain little timber of any real value. Mr. Ward noticed this especially in his tour through the North Cachar hills in the cold season of 1893-94, and, as the result of his observations there, it has become necessary (as stated in paragraph 2 of this Resolution) to reconsider the question of the large areas which it has been proposed to reserve in the North Cachar hills.

9. In paragraphs 42 and 63 of the Report reference is made to the proposed grazing rules. The rule which the Chief Commissioner has framed on this point makes it clear that the raiyats will be allowed unlimited grazing and pasturing in unclassed State forests free of payment for their ploughing and domestic cattle, but that a small fee will be imposed on professional herdsmen. The latter are chiefly Nepalese immigrants.

Chapter III.—Gross yield and outturn of forest produce.

10. The total outturn from Government forests of all classes, expressed in cubic feet, increased from 6,012,554 cubic feet during the fifteen months of 1892-93 to 6,652,665 cubic feet during the twelve months of 1893-94. Of this outturn, about 5½ million cubic feet (or 81 per cent.) were obtained from unclassed forests, and the balance, 1¼ million (or 19 per cent.), from reserved forests. The large increase in the outturn of timber removed by purchasers during the year, from 2,860,157 cubic feet in 1892-93 (fifteen months) to 3,825,081 cubic feet in 1893-94 (twelve months), is especially noticeable. Excepting the Khasi and Jaintia Hills where the results under this head are small, the only district in which there was any falling off worth taking into account was Goalpara; the decrease here is explained to be due "to a lessened foreign demand, to resistance on the part of traders to the application of strict sylvicultural principles, and to increased cost of extraction." More detailed explanation should be given on these points in future reports if the demand on the Goalpara forests continues to decrease. The increased demand generally in the other districts is said to be due to an extension of the timber trade, to the supply of sleepers required for the construction of the Assam-Bengal Railway, and to a large demand for waste lands for the extension of tea cultivation. It is to be regretted that the *sâl* trees in the Kamrup Division were found unsuitable for sleepers, and that the railway are now importing sleepers from outside the Province. There has been a satisfactory increase in recent years in the outturn of tea-boxes made from timber obtained from Government forests in the Assam Valley. In 1889-90, 105,984 boxes were returned as made, and the royalty paid on them was Rs. 6,305; in 1893-94 the figures were 368,323 boxes, and Rs. 20,016 royalty.

11. The statistics showing the outturn of rubber are specially interesting. The outturn from Government forests was 778 maunds as compared with 1,089 maunds in the fifteen months of 1892-93, while 2,737 maunds were imported from beyond the frontier as compared with 3,013 maunds in the previous fifteen months. The chief falling off was in the Lakhimpur district; and this the Conservator, no doubt correctly, attributes to the disturbed state of affairs caused by the Abor Expedition. The receipts from rubber for the last five years are as follows.—1889-90, Rs. 32,977; 1890-91, Rs. 22,222; 1891-92, Rs. 25,585; 1892-93 (fifteen months), Rs. 51,283; 1893-94, Rs. 42,225. These figures must be read together with the explanation given in paragraphs 65 to 67 of the present report. Prior to 1892-93 the rubber *mahals* used to be leased out, the lessees having also the right to purchase rubber from the hill tribes beyond the frontier. But this system was found to be unsatisfactory and was, therefore, done away with; and since 1892-93 royalty at the rate of Rs. 12 a maund has been realised on all rubber shipped for export from the Province, and a similar import duty on all rubber imported into the Province from beyond the frontier, licenses to collect and remove rubber being granted to applicants on payment of a fee of Rs. 10, and licenses to purchase on payment of Rs. 5. The results show that the revenue demand from rubber is already greater than under the old *mahal* system, while it is no doubt capable of still further expansion in the future.

12 The following figures show the financial results of the working of the Forest Department in this province for the last four years.

Chapter IV—Financial results

	Receipts	Charges	Surplus	Proportion of surplus to receipts
	Rs	Rs	Rs	Per cent.
1890-91	3,26,793	2,83,853	42,940	13
1891-92	3,36,129	2,67,525	68,604	20
1892-93 (fifteen months) ...	4,76,620	3,36,060	1,40,560	30
1892-93 (twelve „) ...	4,20,930	2,76,948	1,43,982	34
1893-94 ...	4,92,811	2,65,421	2,27,390	46

These results are eminently satisfactory, and call for no detailed comment.

By order of the Chief Commissioner of Assam,

P. G. MELITUS,

Secretary to the Chief Commissioner of Assam.

A S. P. O (Rev) No 237—425—25-1-95.

No. $\frac{502}{94-2}$-F., dated Simla, the 10th May 1895.

From—DENZIL IBBETSON, ESQ., C.S., Officiating Secretary to the Government of India, Department of Revenue and Agriculture,

To—The Chief Commissioner of Assam.

I am directed to acknowledge the receipt of your letter No. 224 (Forests) dated the 29th January last, forwarding, for the information of the Government of India, the Report on Forest Administration in Assam for the year 1893-94, together with your orders reviewing it. The report was received in this Department one month after the prescribed date.

2. The gross area of reserved forests was augmented during the year by 53 square miles, and, after some rectification of previous figures, is now returned at 3,683 square miles, or 8 per cent. of the entire provincial area. The total area of the unclassed forests (there being in the province no "protected" category) amounted at the close of the year to 7,020 square miles. Thus nearly one-fourth of the entire area of the province is managed by the Forest Department. Progress towards the completion of forest settlements continued to be regrettably slow; and special endeavour must be made to expedite this important work. The area still to be brought under settlement is great, and the operations may drag on indefinitely unless something is done to push them on more vigorously than hitherto The Government of India have noticed with some concern that you are disposed to think that there is a tendency on the part of the Forest Department to restrict the extension of cultivation, to ignore the interests of the cultivator, and to constitute reserved forests without sufficient previous consideration and enquiry as to the value of the areas which it is proposed to reserve. They entertain no doubt that you will issue such instructions both to Deputy Commissioners and to the Conservator as will check any tendency of the kind which may be found to exist. Where the question of reservation touches in any material degree upon the daily life and needs of the agricultural classes, the policy to be pursued will be guided by the general considerations set forth in the Resolution of this Department, No. 22-F. dated 19th October last. But where, as must be the case in many parts of Assam, forest capabilities are greatly in excess of all present requirements; where private rights of user, if they exist at all, can be easily and amply safeguarded; and where no effective demand for land for cultivation is likely to arise in the near future, it should be remembered that the present value of a forest tract may be no safe criterion as to its future worth and, therefore, as to the desirability of reserving it. It is necessary in such circumstances to look far ahead, and a forest which at present is useless may be prospectively of immense value. It must be remembered, moreover, that, as pointed out in paragraph 2 of the letter from this Department conveying the orders of the Government of India on the Forest Administration Report for 1891-92, while disforestation can at any time be effected, difficulty may hereafter arise in the reservation of areas which can now be easily secured. These considerations, however, only point to the desirability of instituting a careful and intelligent enquiry before reservation is effected. The Governor General in Council fully agrees with you that the operations of the Forest Department in the unclassed forests must not be allowed to interfere with the extension of cultivation of a permanent nature; but there are undoubtedly large areas where this consideration does not apply, and the sooner settlement is extended to these the better.

No. 60-F. dated 16th January 1893.

3. The protection of the forests from injury was on the whole satisfactory. The average monthly number of offences prosecuted in the courts remained unchanged, as compared with the number in 1892-93; but it is observed that the

percentage of convictions obtained, which now stands at 75, continued to decline, and the reasons for the decrease have not been explained by the Conservator. The number of cases compounded under section 62 of the Regulation rose from 370 in 1892-93 to 642 in the year under review. The increase is ascribed to stricter supervision, and 90 per cent. of the offences thus dealt with were on account of unauthorized removals of forest-produce. The average sum realized as compensation per head was Rs. 4-7-0, as against Rs. 4-5-0 in the preceding year. The results secured under fire-protection were on the whole good. The proportion of forest area under protection to the total area on the books of the Department, *viz.* 10 per cent., remained unchanged. The proportion of failures to area attempted rose from 0·54 to 5·12 per cent., but this was due to the very unfavourable conditions which existed during the dangerous season of 1893-94. The cost per acre protected showed a satisfactory reduction from 4 pies to 3 pies.

4. The results of the exploitation of the forests, as well as the financial accounts, have been fully reviewed in the Report and in your orders. The quantity of timber removed was largely increased; but the Government of India regret to observe that the Department has so far been unable to take advantage of the market for railway sleepers opened out by the lines now under construction in the province, and consider that the desirability of more fully utilizing the resources of the forests should be impressed on the Conservator. The growth in the trade in tea-boxes is satisfactory, as, when fully developed, it will assist an industry which is of importance to the province, while increasing its forest-revenue. The financial results of the year were exceptionally good, and compare as follows with those of 1892-93 :—

Year.		Receipts.	Charges.	Surplus.	Proportion of Surplus to gross Revenue.
		Rs.	Rs.	Rs.	Per cent.
Forest year ...	1893-94 ...	4,92,811	2,65,421	2,27,390	46
	1892-93 ...	4,20,930	2,76,948	1,43,982	34
	Difference in 1893-94	+71,881	—11,527	+83,408	+12
Financial year ...	1893-94 ...	4,88,497	2,68,223	2,20,274	45
	1892-93 ...	3,82,829	2,64,073	1,18,756	31
	Difference in 1893-94	+1,05,668	+4,150	+1,01,518	+14
	Average for the 5 years ending 1892-93 ...	3,45,826	2,56,497	89,329	26

Both the gross and net receipts were the highest hitherto obtained.

5. In conclusion, I am to convey the acknowledgments of His Excellency in Council for your exhaustive review of the administration of the Forest Department during the year.

G. C. Press, Simla.—No. 134 R. & A. D.—15-5-95.—171.